

PLANNING STUDY

**BRUSH COLLEGE ROAD
FROM WILLIAM STREET ROAD (IL 105)
TO FARIES PARKWAY**

BY:



**BLANK, WESSELINK, COOK, & ASSOCIATES, INC.
2623 E. PERSHING ROAD
DECATUR, IL 62526**

for

CITY OF DECATUR



EXECUTIVE SUMMARY

The Preliminary Planning Study evaluated existing and future traffic for Brush College Road located between William Street at the south end and Faries Parkway at the north end of Brush College Road.

The primary factors affecting Brush College Road traffic were:

1. Frequent traffic delays due to at-grade railroad crossings located within the intersection of Brush College Road and Faries Parkway.
2. Traffic delays due to accidents that occur along the route.
3. Traffic delays at the Brush College Road/William Street Intersection.
4. The existing underpass while narrow and in need of upgrading doesn't appear to appreciably affect the volume of traffic through the underpass.

The intersection of Brush College Road and Faries Parkway as it exists and without interruption of train traffic, functions at an acceptable level of service under current and future traffic volumes.

The intersection of Brush College Road and William Street does not function at an acceptable level of service and requires the addition of a dedicated left turn lane for southbound Brush College Road. The addition of the turn lane would allow traffic to function at an acceptable level of service for current and future traffic volumes.

The existing railroad structure is narrow, has poor drainage, and is in need of upgrading.

Six alternates were studied to improve traffic movements for Brush College Road.

ALTERNATES	DESCRIPTION	EST. CONSTRUCTION COST
1	Do Nothing	
2	Improve intersection at William Street and modify existing railroad structure.	\$ 810,000
3	Re-align Brush College Road over the Norfolk Southern railroad	\$ 4,000,000
4	Improve James Street with new bridge carrying James St. over the Norfolk Southern Railroad	\$ 3,980,000
5	Improve Nickey Ave. with tunnel under Norfolk Southern Railroad	\$ 2,230,000
6	Improve Lake Shore Drive with tunnel under Norfolk Southern Railroad	\$ 2,200,000

Alternate No. 1 does not address the problem.

Alternate No. 2 is significantly less construction cost and has the least social and economic impact on the area; therefore, it is recommended that this alternate receive further study.

TABLE OF CONTENTS

1.	INTRODUCTION	1
2.	DESCRIPTION OF EXISTING FACILITIES & NEED FOR IMPROVEMENT	1–3
3.	DESCRIPTION OF ALTERNATE CONSIDERATIONS	3–8
5.	ENVIRONMENTAL STATEMENT	8–9
6.	OTHER STUDY CONSIDERATIONS	9–11
7.	CONCLUSIONS AND RECOMMENDATIONS	11–12

Exhibit 1	Location Map
Exhibit 2	Existing Railroad Structure Plans
Exhibit 3	Existing Typical Cross Sections
Exhibit 4	Traffic Analysis
Exhibit 5	Alternate Location Map
Exhibit 6	Brush College Road/William Street Intersection Modifications
Exhibit 7	Structure Modifications
Exhibit 8	Brush College Road Proposed Bridge Over Railroad
Exhibit 9	Proposed Typical Sections And James Street Plan And Profiles
Exhibit 10	Proposed Typical Sections And Nickey Avenue Plan And Profiles
Exhibit 11	Lake Shore Drive Plan And Profiles
Exhibit 12	Public Participation

INTRODUCTION

The City of Decatur issued a Request for Statement of Qualifications & Proposals for “Professional service to perform a preliminary planning study for future improvements of Brush College Road between William Street Road (Illinois Route 105) and Faries Parkway” dated August 26, 2004. (See Exhibit 1, Location Map) for study area location.

Blank, Wesselink Cook and Associates and sub-consultant Berns, Clancy and Associates, responded to the request and were subsequently selected and authorized to proceed by contract dated November 8, 2004.

DESCRIPTION OF EXISTING FACILITIES AND NEED FOR PROPOSED IMPROVEMENT

FAU 7448 (CH-1) Brush College Road was originally constructed in the 1920's as a two-lane, two-way, 18-foot wide “Asphalt Pavement” roadway.

The existing railroad structure carrying the Norfolk Southern Railroad over Brush College Road was constructed about 1929 and was built to accommodate one east bound and one west bound mainline track, one existing rail yard lead track and one future rail yard lead track. In 1951 the existing structure was widened to accommodate additional rail yard tracks. At the time of construction, the railroad structure was designed to allow for two 10-foot wide travel lanes under the railroad. (The Railroad Structure Plans are included as EXHIBIT 2)

In the years 1983 and 1984, Brush College Road was reconstructed from William Street to Harrison Avenue just north of Faries Parkway. The new roadway consisted of variable width 11 foot to 13 foot northbound lanes, variable width 11 foot to 17 foot southbound lanes and a variable width of 0 foot to 15.5 foot bi-directional left turn lane. The material of construction was 10-inch Portland Cement Concrete. Along with the roadway improvements, the foundation of the existing railroad structure was modified to provide for two 11-foot travel lanes under the railroad. (See EXHIBIT 3, TYPICAL CROSS SECTIONS).

Along with the roadway improvements, the intersections of Faries Parkway/Brush College Road and William Street/Brush College Road were upgraded to add turn lanes and traffic signals.

During the early 1990's, Brush College Road from Faries Parkway north to IL Route 48 was upgraded from a two-lane two-way roadway to a five-lane roadway with two 12-foot thru-lanes in each direction and a 12-foot bi-directional left turn lane. This improvement included the additional widening of Brush College Road from Olive Street north to Faries Parkway and reconstruction of the Brush College Road/Faries Park intersection including additional lanes and upgrading the traffic signals.

The existing intersection of Brush College Road and Faries Parkway is a signalized intersection with current cycle length of approximately 104 seconds.

This 4-leg intersection is configured as follows:

NORTHBOUND	Dedicated left turn lane Shared thru/left lane Dedicated thru lane Dedicated right turn lane
WESTBOUND	Dedicated dual left turn lanes Dedicated thru lane Shared thru right turn lane
SOUTHBOUND	Dedicated left turn lane Dedicated thru lane Shared thru right turn lane
EASTBOUND	Dedicated dual left turn lanes Dedicated dual thru lanes Dedicated dual right turn lanes

The Norfolk Southern Railroad has an east west track running across the north leg of the intersection and there is a track serving Tate and Lyle running north and south across the west leg of the intersection. In addition, there are four lead tracks across Faries Parkway just west of the intersection.

This intersection was video taped during peak hours, without any train movements, and the intersection seemed to operate adequately. There were no significant delays and no spill over into adjoining lanes was observed.

Based on the personal interviews and observations, traffic in this area is often subject to significant delays due to train movements and switching operations.

The existing intersection of Brush College Road and William Street is a signalized intersection with a current cycle length of approximately 72 seconds.

This 4-leg intersection is configured as follows:

NORTHBOUND	Shared left, thru, right turn lane
WESTBOUND	Dedicated left turn lane Dual thru lanes Dedicated right turn lane
SOUTHBOUND	Shared left thru lane Dedicated right turn lane

EASTBOUND

Dedicated left turn lane
Dedicated thru lane
Shared thru right turn lane

The existing roadway between William Street and Faries Parkway has been in service for 20 years since its last reconstruction and is in need of joint repair, patching, and other normal maintenance items.

In addition to the maintenance items for the roadway, there are driver complaints of traffic delays, accidents, and the narrow underpass carrying the various railroad tracks over Brush College Road.

DESCRIPTION OF ALTERNATE CONSIDERATIONS

To develop solutions to the traffic delays and geometric deficiencies, it is necessary to investigate the cause of the delays and evaluate the geometric constraints on the roadway system as well as existing and future traffic along with the capacity of the intersections to accommodate the traffic.

To gather this information, the intersections of Brush College Road/Faries Parkway and Brush College Road/William Street were video taped during peak volume hours so the traffic movements and signal cycles could be evaluated.

In addition to the videotaping, personal interviews were held with the more significant generators of traffic in the areas. BWC requested input from Archer Daniels Midland Company (ADM), Richland Community College (RCC), and Brush College School. (See EXHIBIT 12 PUBLIC PARTICIPATION)

Based on the information obtained from the videotapes previously prepared, intersection design studies, meeting notes, and the personal interviews, Berns Clancy and Associates performed planning level traffic projections and evaluated the impact on the intersections of Brush College Road/Faries Parkway and Brush College Road/William Street. The impact of the narrow underpass was also evaluated (See EXHIBIT 4 TRAFFIC ANALYSIS). In reviewing the interview notes, some common themes stood out.

- Frequent traffic delays due to railroad traffic
- Traffic delays due to accidents
- The narrow underpass doesn't appear to be the biggest source of complaints as related to traffic delays

Based on the video tapes, the personal interviews, the traffic study prepared by Berns Clancy & Associates and inspection of the area, it was decided to study an area bound by Brush College Road on the west, Lake Decatur on the east, William Street on the south and Faries Parkway on the north.

Because the intersection of Brush College Road and Faries Parkway appears to be functioning at an acceptable level under current and future traffic, no improvements for this intersection are proposed.

Within this study area, 6 alternates were considered as follows (See EXHIBIT 5, ALTERNATE LOCATION MAP):

<u>ALTERNATE</u>	<u>DESCRIPTION</u>
1	Do nothing
2	Improve the intersection at Brush College Road and William Street and modify the existing underpass.
3	Improve the intersection at Brush College Roads and William Street and provide a new structure carrying Brush College Road over the railroad.
4	Improve James Street and provide a new structure carrying James Street over the railroad. Construct new intersections at Faries Parkway and William Street.
5	Improve Nickey Avenue and provide a tunnel carrying Nickey Avenue under the railroad. Construct new intersections at Faries Parkway and William Street.
6	Improve Lakeshore Drive and provide a tunnel carrying Lake Shore Drive under the railroad. Construct new intersections at Faries Parkway and William Street.

ALTERNATE 1. DO NOTHING:

This alternate does not provide for any improvements to the current roadway, intersections, or railroad structure other than normal maintenance of the roadway.

There would be no cost beyond normal maintenance and no improvement in traffic operations over existing conditions.

ALTERNATE 2. IMPROVE INTERSECTION AT WILLIAM STREET AND MODIFY THE EXISTING RAILROAD STRUCTURE

This alternate considered upgrading the intersection of brush College Road and William Street and modifying the existing railroad structure to provide for safer operation by the traveling public.

The improvements at the intersection would consist of the addition of a dedicated left turn lane for southbound Brush College Road along with upgrading the existing signal system to accommodate the additional lane and maximize intersection efficiency.

The proposed southbound traffic lane configuration is:

- Dedicated left-turn lane
- Shared left/thru lane
- Dedicated right turn

The existing southbound traffic lane configuration is:

- Shared left/thru lane
- Dedicated right turn

The length of the existing southbound turn lanes would be extended from the current 200 ft. of storage to approximately 320 ft. of storage. (See EXHIBIT 6, BRUSH COLLEGE/WILLIAM ST. INTERSECTION MODIFICATIONS).

Alternate 2 also considers options for updating the existing underpass to provide for safer operation by the traveling public.

OPTION A considers the removal of the existing sidewalk along the east side of the railroad structure and widening the existing roadway to provide for two 12-foot lanes (SEE EXHIBIT 7A, STRUCTURE MODIFICATIONS) for proposed detail.

Structural plans for the railroad structure were obtained from Norfolk Southern Railroad and a structural analysis was performed to determine the feasibility of this option.

The existing walkway is actually the top of the 4-foot thick abutment footing. The analysis revealed that removal of the footing to the extent necessary to provide for two 12-foot driving lanes would increase the stress in the remaining footing beyond the allowable limit for this type of structure. Therefore, it was determined that Option A is not a feasible option.

OPTION B considers the removal of an exiting Chicago Northern & Illinois Central (CN & IC) spur track and addition of a southbound travel lane through the existing structure. (SEE EXHIBIT 7B SHEETS 1 AND 2 OF 2)

Currently there exists a CN & IC lead track that is located along the west side and generally parallel with Brush College Road. The track originates along Brush College Road just south of Caterpillar and terminates at Tate and Lyle (former AE Staley Co.).

This track, constructed originally in the 1920's provides CN & IC direct access to Tate and Lyle grain storage facility without accessing other railroad company tracks. Currently there are approximately 200 cars per week coming into the plant delivering corn, and approximately 200 cars per week leaving the plant with products produced at Tate and Lyle (SEE INTERVIEW NOTES IN EXHIBIT 12)

The removal of the track and modification of the structure would allow for construction of a 12-foot wide southbound travel lane and modification of the existing roadway to provide for a 12-foot northbound lane along with increasing the width of the existing sidewalk.

Implementation of this option would require raw materials be delivered to Tate and Lyle from the West and would require CN & IC to move the 200 cars per week through the Tate and Lyle Plant. This option would also require coordination and agreements between Tate and Lyle, CN & IC Railroad, possibly Norfolk Southern Railroad, and CSX Railroad.

An Industrial Process line between ADM and Tate & Lyle also runs along the intended route and would have to be relocated.

Inherently, agreements between and with railroads can be a time consuming process. In the interim, while this option is being studied, there are other improvements to the existing structure that could be made at relatively low cost that would improve the perception of the narrow roadway and increase the comfort level of the traveling public. These improvements include painting, lighting, improving the pavement structure and improving the drainage.

The order of magnitude cost for Alternate 2, beyond normal maintenance cost is:

INTERSECTION IMPROVEMENTS AT WILLIAM ST.	\$ 190,000.00
OPTION B STRUCTURE MODIFICATIONS	\$ 620,000.00

Please note the costs do not include CN & IC would have to pay to use Norfolk Southern Railroad and or CSX Railroad tracks.

ALTERNATE 3. IMPROVE INTERSECTION AT WILLIAM STREET AND PROVIDE NEW STRUCTURE OVER RAILROAD

This alternate consists of the same modifications to the Brush College Road/William Street Intersection as in Option No. 2.

In addition to the intersection modifications, this alternate considers the construction of a 250-foot long structure over the existing railroad at Brush College Road. The new structure would be constructed to the east of the existing underpass and would be constructed while maintaining traffic along Brush College Road.

The approach roadways would be constructed on embankment contained by reinforced earth walls to minimize right-of-way requirements. This alternate would require, at a minimum, relocation of two residential properties, right-of-way purchase from three commercial properties, relocation of an Ameren IP substation, relocation of power transmission lines, and modifications to ADM industrial process piping. (See EXHIBIT 8, PROPOSED BRIDGE OVER RAILROAD)

The order of Magnitude Cost for this option, beyond normal maintenance cost is **\$4,000,000**.

ALTERNATE 4. IMPROVE JAMES STREET WITH NEW STRUCTURE CARRYING JAMES STREET OVER RAILROAD

This alternate consists of improving James Street between William Street and Faries Parkway. Reconstructing the existing intersection at James and William Streets and constructing a new intersection at James Street and Faries Parkway. Both intersection improvements would include traffic signal installations.

A new 300 foot long structure would be constructed over the existing Norfolk Southern rail yard. To minimize right-of-way taking the approach roadway, embankment would be contained using reinforced earth walls (See EXHIBIT 9 – PROPOSED TYPICAL SECTIONS AND JAMES STREET PLAN & PROFILES from Marietta Street to Faries Parkway)

This alternate would require, at a minimum, relocation of two residential properties and two commercial properties.

The intent would be to maintain James Street as a two-lane roadway and allow it to redistribute a portion of the traffic going to the ADM East Plant.

The other consideration is to make James Street one-way northbound and Brush College Road one-way southbound. Either scenario would reduce the existing and future traffic on Brush College Road and improve traffic operations.

The order of magnitude cost for this option, beyond normal maintenance cost is **\$3,980,000**.

ALTERNATE 5 – IMPROVE NICKEY AVENUE WITH A TUNNEL UNDER THE RAILROAD

This alternate consists of improving Nickey Avenue between William Street and Faries Parkway. Constructing a new intersection at Nickey Avenue and William Street and a new intersection at Nickey Avenue and Faries Parkways. Both intersection improvements would include traffic signal installations. Nickey Avenue north of Lakewood Avenue would be realigned to the east to line up with ADM's main entrance to the East Plant. The relocated Nickey Avenue would pass under the existing Norfolk Southern Railroad via a tunnel. (See EXHIBIT 10 – PROPOSED TYPICAL SECTIONS AND PLAN AND PROFILES, Nickey Avenue from Glenwood Avenue north to Faries Parkway). This alternate, as a minimum, would require one-residential relocation. The intent would be to maintain Nickey Avenue as a two-lane roadway and allow it to redistribute a portion of the traffic going to the ADM East Plant.

Nickey Avenue is too far away from Brush College Road for consideration as a one-way couple. This alternate would allow for reduced traffic and improved operations along Brush College Road.

The order of magnitude cost, beyond normal maintenance cost for this option is **\$2,300,000**.

ALTERNATE 6 – IMPROVE LAKESHORE DRIVE WITH A TUNNEL UNDER THE RAILROAD

This alternate consists of improving Lakeshore Drive between William Street and Faries Parkway, reconstructing the existing intersection at Lakeshore Drive and William Street, and constructing a new intersection at Nickey Avenue and Faries Parkway. Both intersection's improvements would include traffic signal installations. Lakeshore Drive north of Lakewood Avenue would be realigned to the west to line up with ADM's east employee parking lot at the East Plant. The relocated Lake Shore Drive would pass under the existing Norfolk Southern Railroad via a tunnel. The proposed typicals would be similar to those shown in EXHIBIT 10. (See EXHIBIT 11 LAKESHORE DRIVE from Lakewood Avenue North To Faries Parkway). This alternate would not require any relocations.

The intent would be to maintain Lakeshore Drive as a two-lane roadway and allow it to redistribute a portion of the traffic going to the ADM East Plant. This alternate would reduce the existing and future traffic on Brush College Road. Lakeshore Drive is too far away from Brush College Road for consideration as a one-way couple. This alternate would allow for reduced traffic and improved operations along Brush College Road.

The order of magnitude cost, beyond normal maintenance cost for this option is **\$2,200,000**.

ENVIRONMENTAL STATEMENT

As part of the Planning Study of the Brush College Road corridor, a general investigation of associated environmental issues was conducted. The purpose of the environmental investigation was to generally survey possible associated environmental issues to identify any obvious problems that might influence the choice of alternate approaches to improving traffic conditions along the corridor and to provide some direction for environmental studies that might be warranted if further development of possible improvements were pursued.

As a framework for our investigation ASTM E-1527-00 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" was used as a general guide for our data collection. This standard practice is primarily designed to permit the user to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability associated with hazardous materials on property. However, it does define an investigation procedure that can be used in part for other purposes. Specifically, the ASTM procedure for the environmental and historical records review was used. Due to the large area involved and the limitation of funds, other aspects of the ASTM procedure were not completed at this time.

In addition, the National Environmental Policy Act of 1969 (NEPA) and the resulting State of Illinois statutes require that all State and local Agencies include in their decision making process the consideration of a range of environmental issues including possible impact of any development on natural areas, historic sites, flood plains, wetlands and FCC and FAA facilities. Therefore we included an overview of such information in our data search.

The data search area used was that defined by the ASTM, which consists of areas of increasing radii based upon the significance of the data being searched. The center of the

search area is selected on the subject site. In the case of the planning study, we wished to obtain data over a fairly large area that would include the existing roadway and intersections and the most probable possible alternate routes. Therefore, we chose the intersection of James and Marietta as the center of the search area. We searched the Standard ASTM search radii about that center plus ¼ mile.

The following data was obtained and is included as Appendix 1 (ENVIRONMENTAL DATA REPORT):

1. EDR Radius Map
2. Government Records Searched/Data Currency Tracking
3. GeoCheck-Physical Setting Source Addendum
4. City Directory Abstract
5. Historical Topographic Map Report
6. NEPACHECK
7. Sanborn Map Report
8. Aerial Photo Decade Package

The data search findings reveal a number of leaking underground storage tanks (LUST) incidents in the search area. This certainly is not unexpected. The LUST incidents do not appear to have a significant impact on possible improvement of the traffic corridor. However, their specific status should be reviewed with respect to any alternates selected for more detail study.

The entire area east of Brush College and south of Faries to the Lake is indicated as a Threatened or Endangered Species Area for the State of Illinois. The designated species is the Bewick's Wren. While this issue must be addressed during later stages of this project, it is not likely to prevent transportation improvements in the area.

While the data search revealed a variety of environmental records relating to the subject area in varying degrees, there was no evidence of major environmental issues that would obviously impact a transportation improvement project in the area. If the nature of such a project becomes more specific in terms of location the environmental issues should be reviewed in more detail. The Illinois Department of Natural Resources and the Illinois Historic Preservation Agency should be consulted for their input and approval at that time.

OTHER STUDY CONSIDERATIONS

JURISDICTIONAL BOUNDARIES

The Study Area lies within the City of Decatur corporate limits and is therefore, under the jurisdiction of the City of Decatur. William Street is a marked state route and will require coordination with Illinois Department of Transportation through the District 7 office in Effingham.

A portion of the Brush College Road/Faries Parkway intersection is within the City of Decatur jurisdiction and a portion of the intersection is within Macon County jurisdiction. Any modifications to the Brush College Road/Faries Parkway intersection will need to be coordinated with Macon County.

PROPOSED DEVELOPMENT

The entire area south of Lakewood Avenue and East of Brush College Road is developed as single-family residential housing with the exception of commercial businesses along the southern limits of Brush College Road.

The area north of Lakewood Avenue and east of Brush College Road is a mixture of single-family residence, commercial, light industrial and heavy industrial including Norfolk Southern rail yards. This area has the potential to be developed as heavy industrial; however, there are no known plans for immediate development.

PUBLIC TRANSPORTATION

Decatur Public Transportation Maps indicate a designated bus route along William Street with a supplemental service route along Brush College Road, Marietta Street and James Street. There is also a designated bus route, which runs east along Faries Parkway then north on Brush College Road to Richland Community College.

EMERGENCY SERVICE ROUTES

The study area allows access to all emergency service vehicles. Other than possibly during construction, access for emergency vehicles would either remain at its current level or be improved by any of the suggested alternates.

LAND USE AND RIGHT-OF-WAY

Based on the Decatur Urban Area Land Use Plan, the area south of Lakewood Avenue and east of Brush College Road is designated "Low Density Residential" except for small amount of "High Density Residential" and "Commercial" located at the southern limits of Brush College Road.

Right-of-way along Brush College Road varies from 55 feet in width to 112 feet in width. Right-of-way along James Street, Nickey Avenue and Lake Shore Drive is 60 feet in width.

DRAINAGE IMPACTS

None of the suggested alternates would appreciably add to or significantly alter current drainage patterns in the study area.

CEMETRIES

The only known cemetery in the area is St. Johns Lutheran Cemetery located at the northeast corner of Brush College Road and Faries Parkway. None of the suggested alternates will have an impact on the cemetery.

SOCIAL/ECONOMIC IMPACTS

Each of the suggested alternates would have both social and economic impacts on the study area.

The "Do Nothing" Alternate would continue a negative impact on the social and economic environment in the area, and without improvements these impacts will increase with increased traffic over time.

The Alternates No. 2 and 3 along Brush College Road would have the least significant impacts on the social and economic trends of the area because Brush College Road is currently the primary north south route between William Street and Faries Parkway. Any improvements to traffic operations should improve existing and future impacts.

The Alternates No. 4, 5, and 6 along James Street, Nickey Avenue, and Lakeshore Drive would have significant impact on the single-family residential setting. Each of these alternates would provide for a significant increase in the volume of vehicle traffic and the number of multi-unit vehicles using these streets. In terms of residential properties affected, James Street would affect approximately 37 properties, Nickey Avenue approximately 23 properties, and Lakeshore Drive approximately 32 properties. In addition to the residential impacts, the commercial properties along Brush College Road, some of which is retail, would experience reduced traffic volumes and possibly reduced revenue.

CONCLUSIONS AND RECOMMENDATIONS

Brush College Road is the only north south roadway between William Street and Faries Parkway from IL Route 121 (22nd Street) east to Lake Decatur. A large portion of, approximately, 15,000 vehicles per day serve Archer Daniels Midland Company, Richland Community College and Caterpillar Tractor Company. Because of the heavily industrialized nature of the area, Brush College Road also carries a significant number of multi-unit vehicles. Traffic delays are experienced primarily during the morning and evening peak hours of operation.

The apparent primary reasons for the delays are train traffic at Faries Parkway and Brush College Road, accidents along the traveled route, and back-ups at William Street and Brush College Road.

During interviews with personnel at ADM, they indicated they have unsuccessfully tried on more than one occasion to have the railroad alter their schedule so the switching operations

don't coincide with the peak vehicle traffic hours. In lieu of building separation structures, it would appear the delays due to train movements will have to be tolerated.

Alternate 1 – Do nothing, while certainly the least cost does not address any of the reasons for the traffic delays and therefore, is not an alternate recommended for further study.

Alternate 2 – Improving the William Street/Brush College Road Intersection and modifying the existing railroad structure addresses the delays at the intersection and provides for safer operation at the underpass at a total estimated cost of **\$810,000**, considerably less than the estimated cost for Alternates 3, 4, 5, and 6.

This alternate along with consideration for reducing the number of access points along Brush College Road is recommended as an alternate for further study.

Alternate 3 – Modification of the intersection at Brush College Road and William Street along with construction of a structure over the railroad addresses the delays at the William Street intersection and those complaints about the narrow underpass at the railroad. This improvement results in an estimated cost of **\$4,000,000**.

Since this alternate shares the same corridor as Alternate 2, it would seem reasonable to consider further study of this alternate as an expansion of Alternate 2.

Alternates 4, 5, and 6 all share common traits:

Each would reduce the amount of traffic on Brush College Road by providing another corridor between William Street and Faries Parkway in the area of ADM.

Each would come at significant financial cost with Alternate 4 estimated at approximately **\$4,000,000** and Alternates 5 and 6 each in the range of **\$2,300,000**.

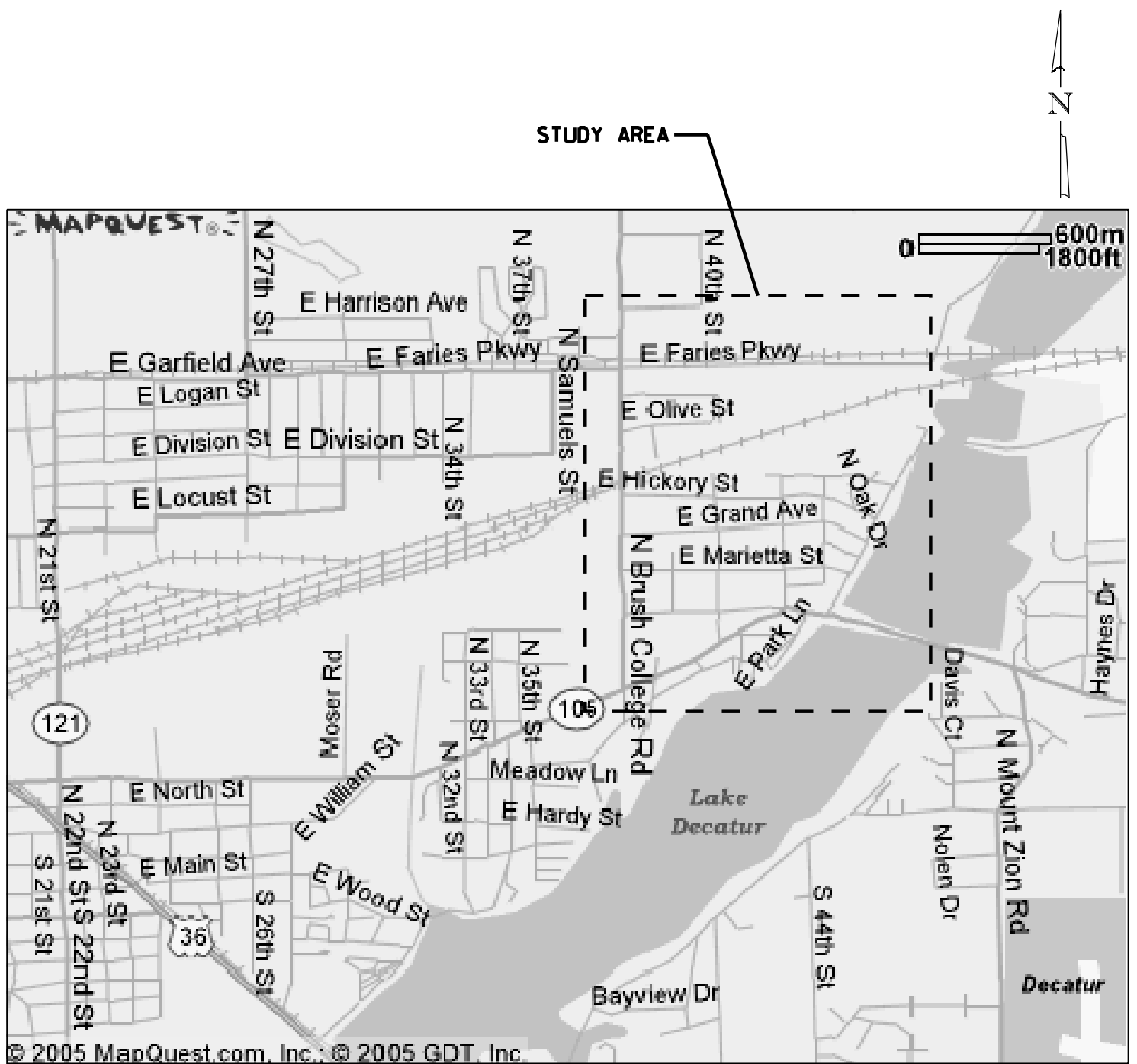
Each would come with significant social impacts to the residents in the area due to the increased passenger car and multi-unit vehicle traffic.

None of these alternates improve the effects of train traffic at the intersection of Brush College Road and Faries Parkway.

Because of the significant financial and social cost, Alternates 4, 5, and 6 are not recommended for further study.

EXHIBIT 1

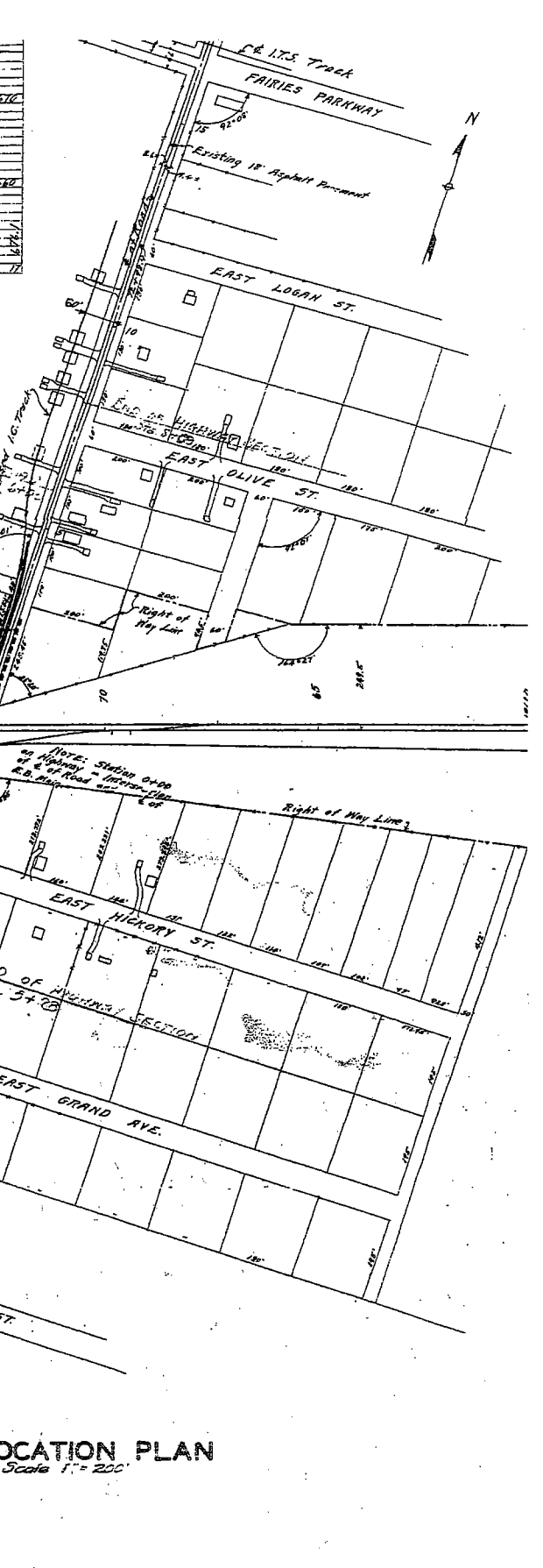
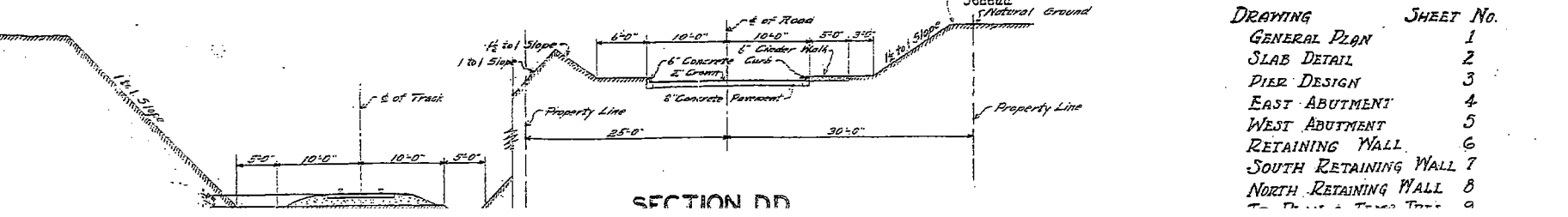
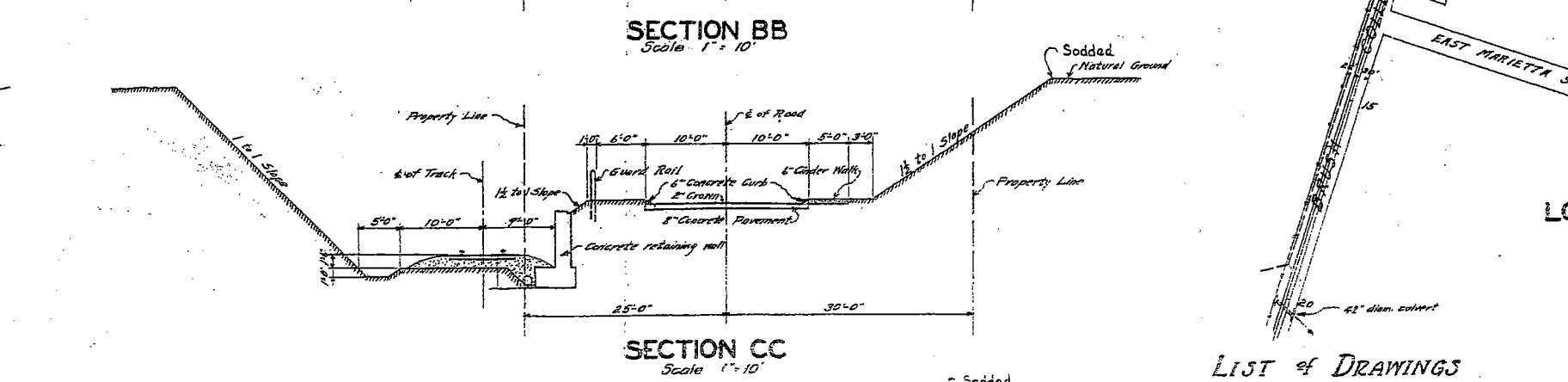
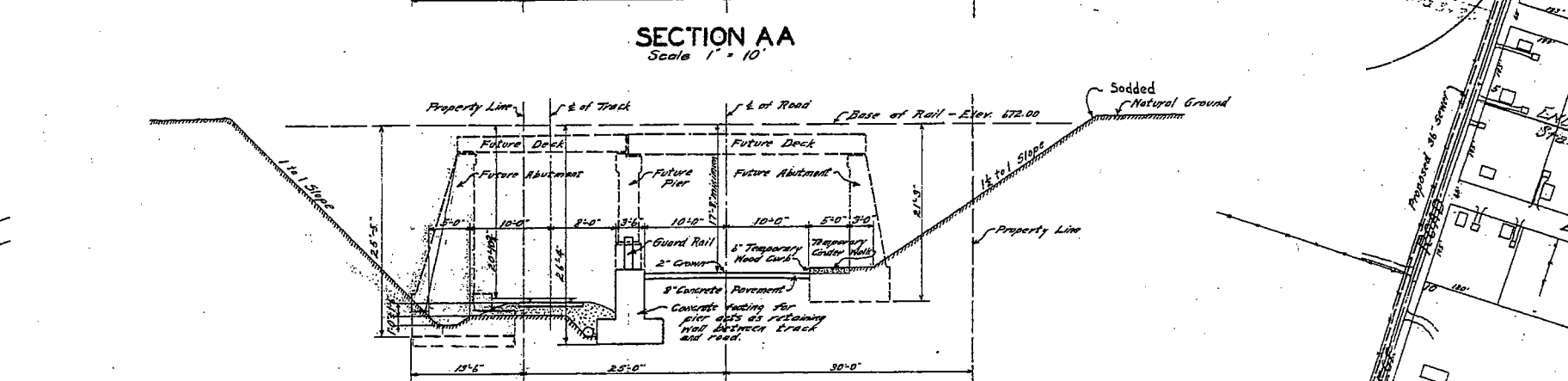
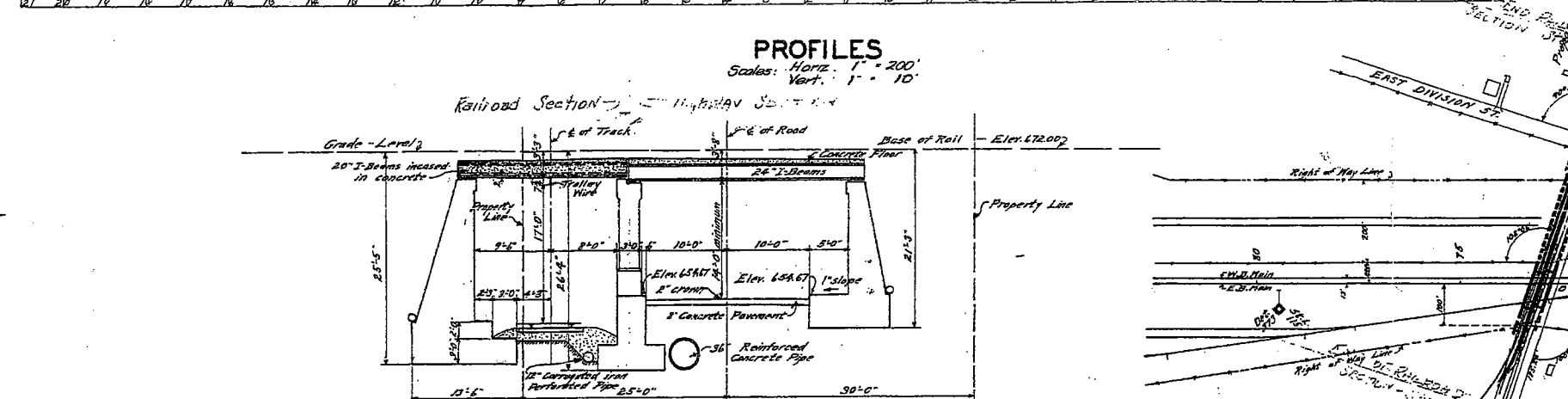
LOCATION MAP



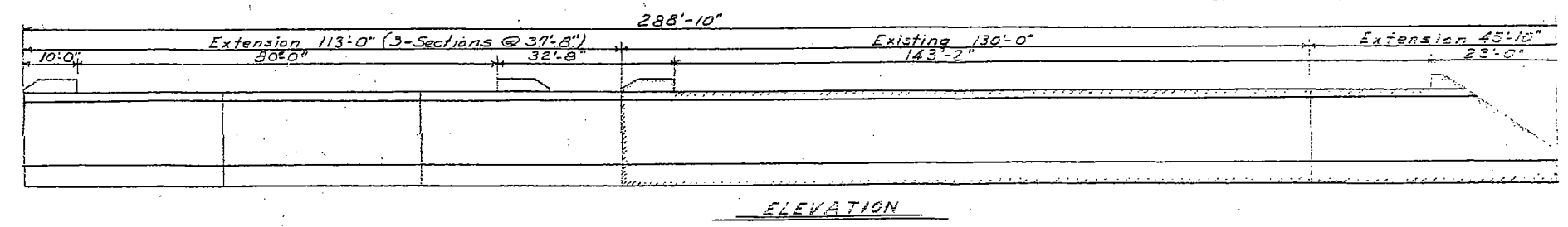
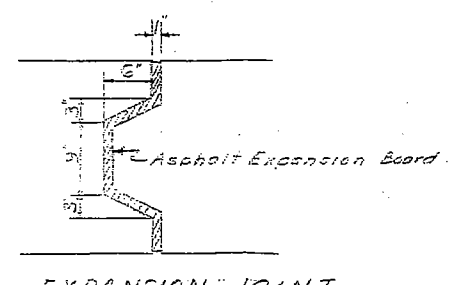
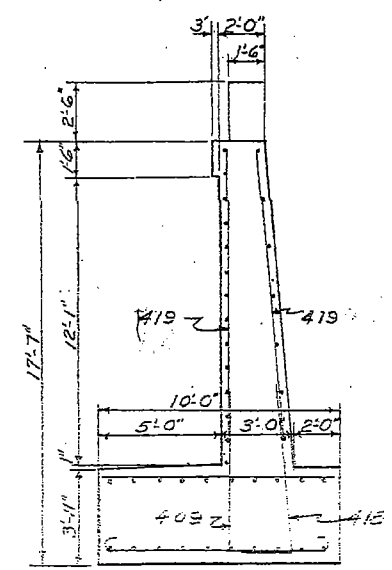
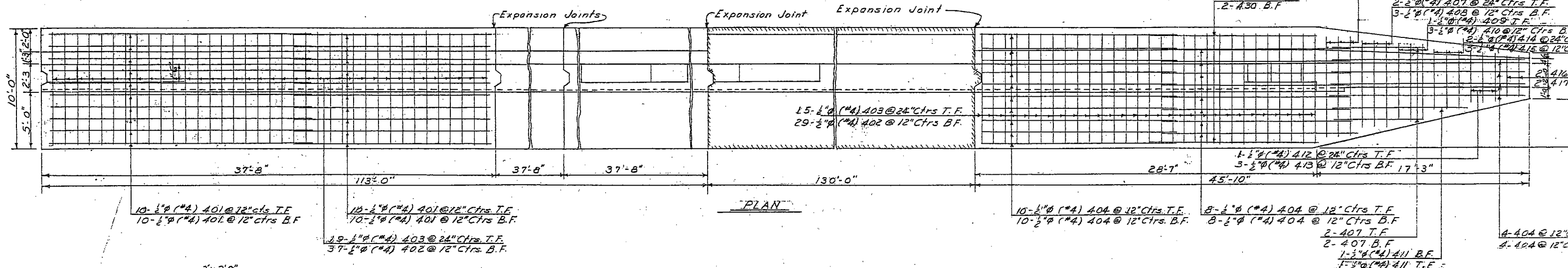
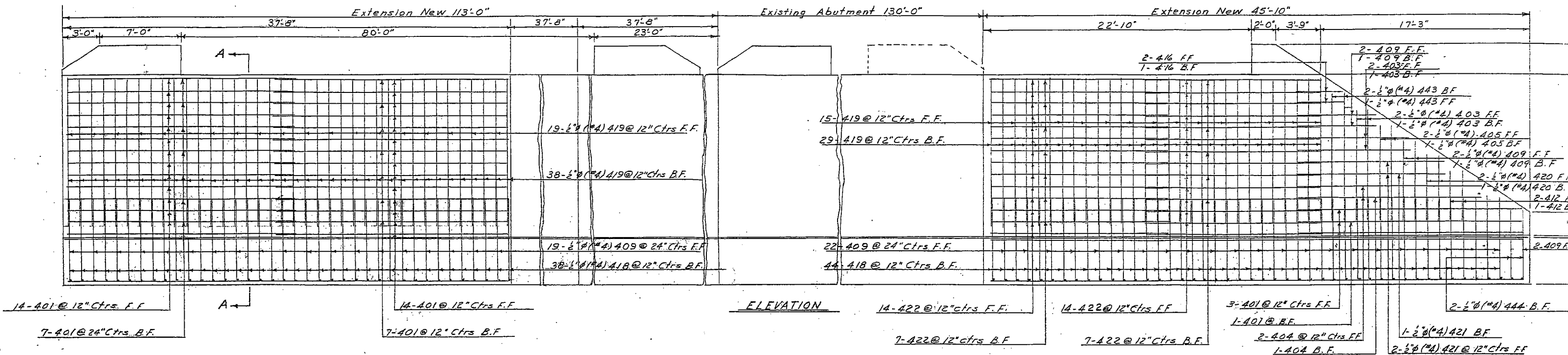
STUDY AREA LOCATION MAP

EXHIBIT 2

EXISTING RAILROAD STRUCTURE PLANS



LIST of DRAWINGS		EXHIBIT A	
DRAWING	SHEET No.	WABASH RAILWAY	
GENERAL PLAN	1	DECATUR DIVISION	
SLAB DETAIL	2	DECATUR ILLINOIS	
PIER DESIGN	3	GENERAL PLAN	
EAST ABUTMENT	4	BRUSH COLLEGE ROAD	
WEST ABUTMENT	5	GRADE SEPARATION	
RETAINING WALL	6	OFFICE OF THE CHIEF ENGINEER	
SOUTH RETAINING WALL	7		
NORTH RETAINING WALL	8		



East Abut

A. F. E. NO. _____ DATE COMPLETED _____

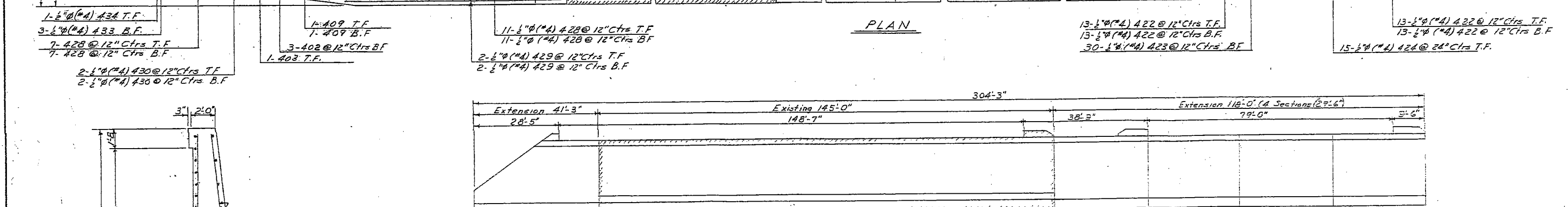
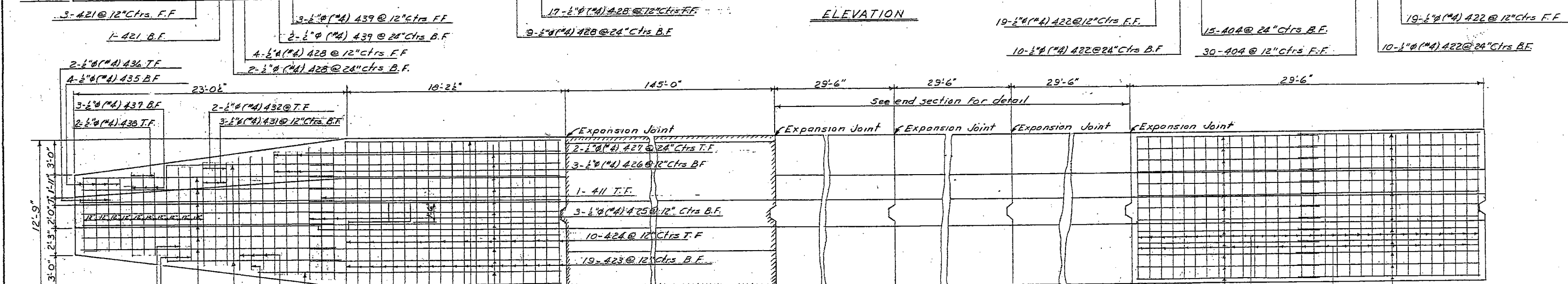
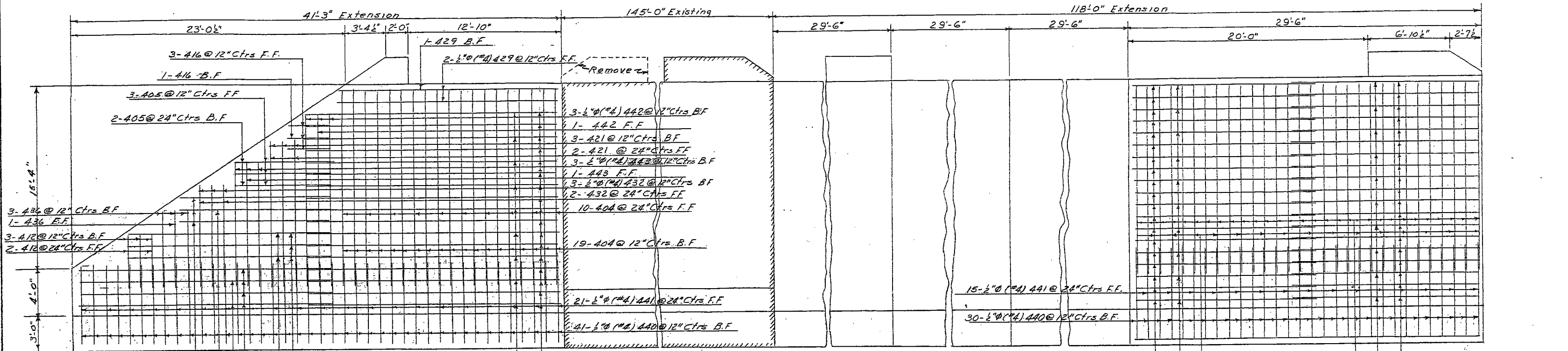
WABASH RAILROAD COMPANY

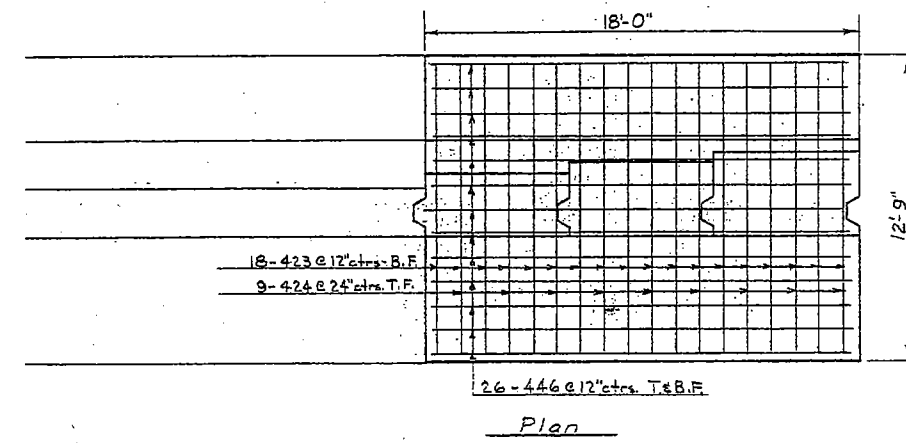
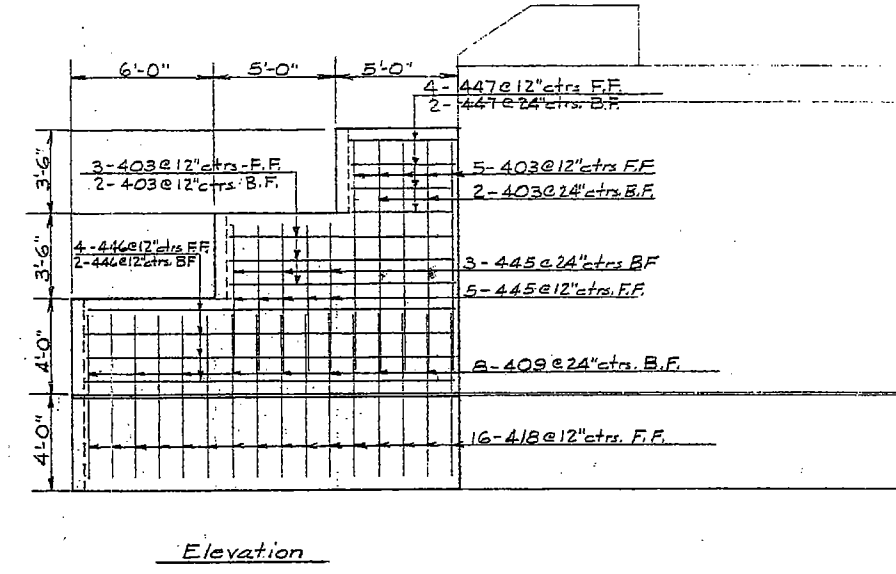
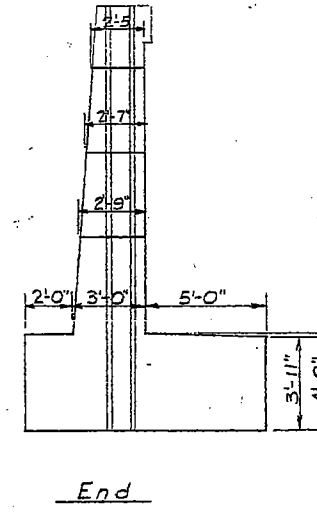
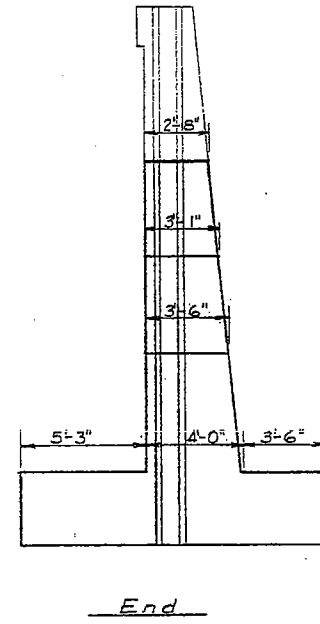
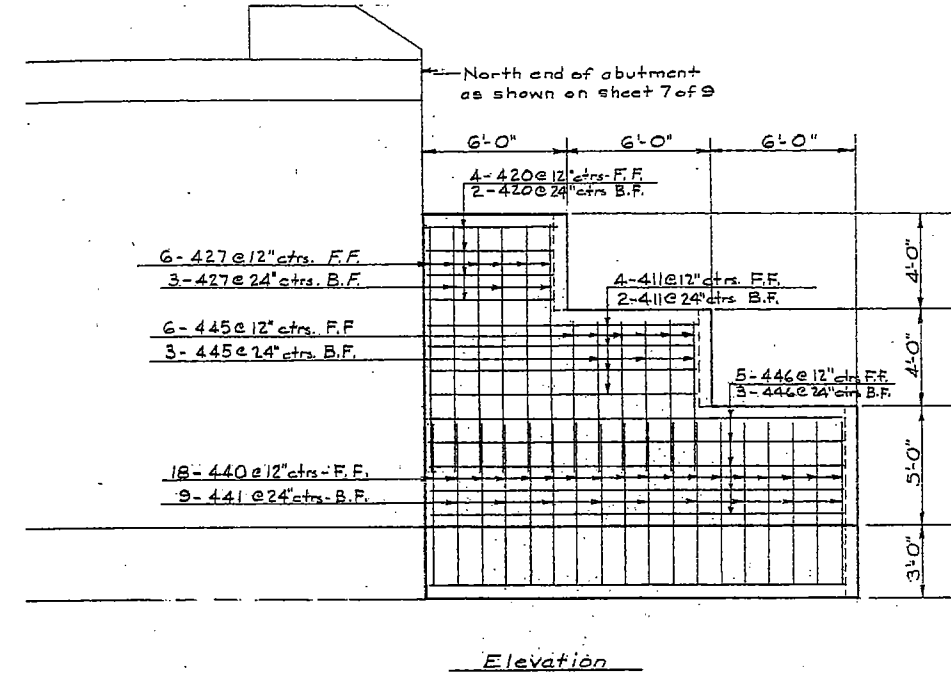
OFFICE OF CHIEF ENGINEER

STRUCTURE: BRUSH COLLEGE ROAD BRIDGE EXT.

LOCATION: DECATUR, ILL.

DIVISION: DECATUR

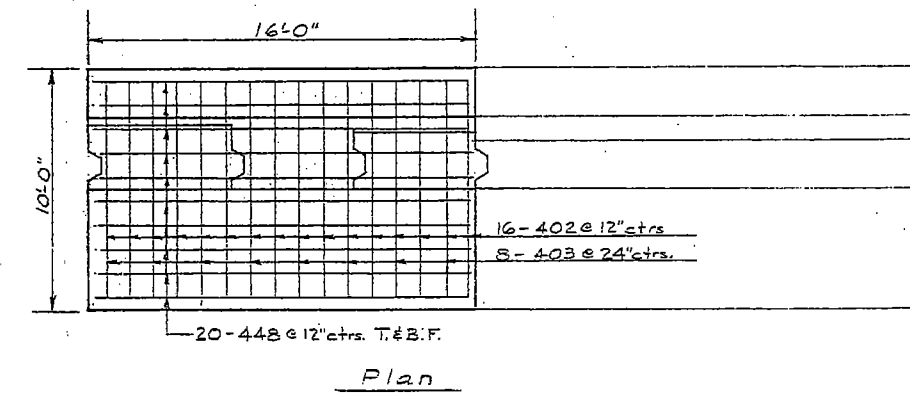




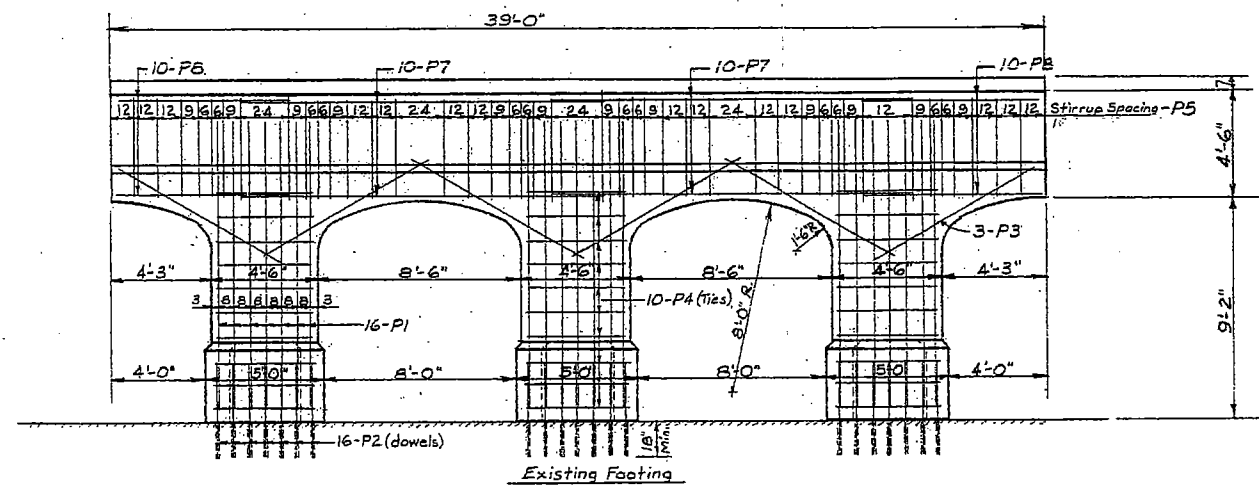
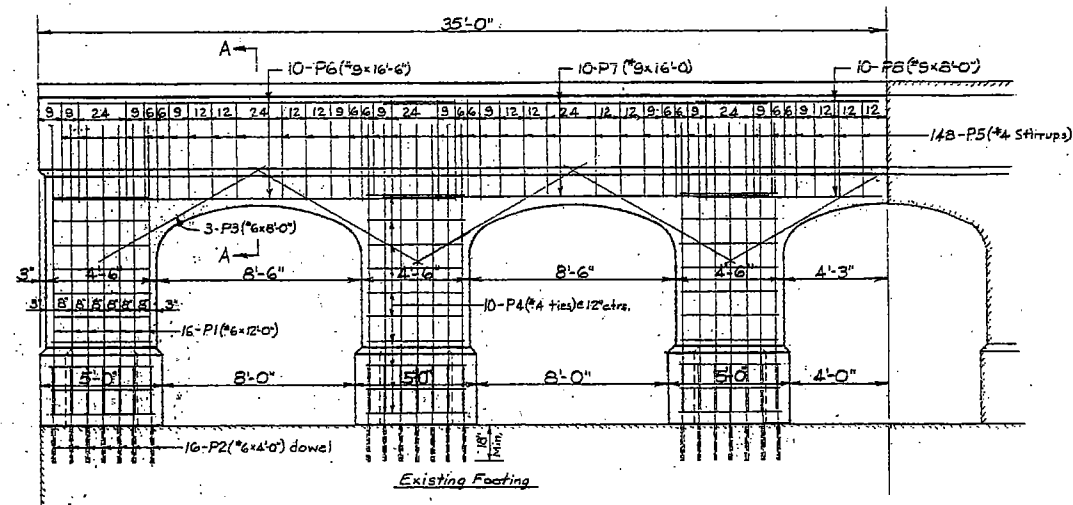
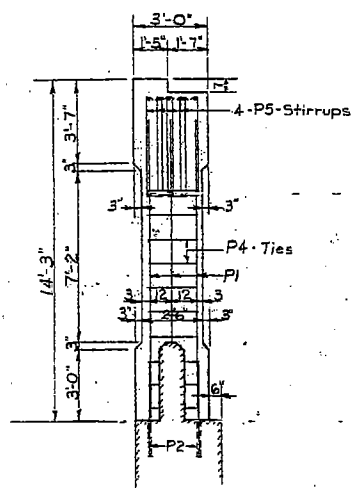
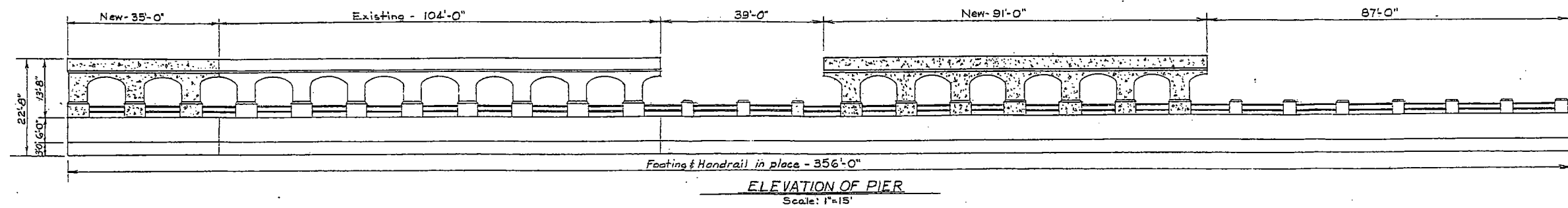
WEST ABUTMENT EXTENSION

REINFORCING BARS				
No.	Mk.	Size	Type	Location
16	402	*4 x 10'-6"	Bent	East Abut.
20	403	" x 9'-6"	Str.	" "
8	409	" x 6'-3"	"	" "
6	411	" x 11'-6"	"	West "
16	418	" x 6'-3"	Bent	East "
6	420	" x 5'-6"	Str.	West "
18	423	" x 13'-0"	Bent	" "
9	424	" x 12'-0"	Str.	" "
9	427	" x 10'-0"	"	" "
9	440	" x 9'-3"	Bent	" "
16	441	" x 6'-9"	Str.	" "
17	445	" x 6'-0"	"	Both "
40	446	" x 17'-6"	"	" "
6	447	" x 4'-6"	"	East "
20	448	" x 15'-6"	"	" "

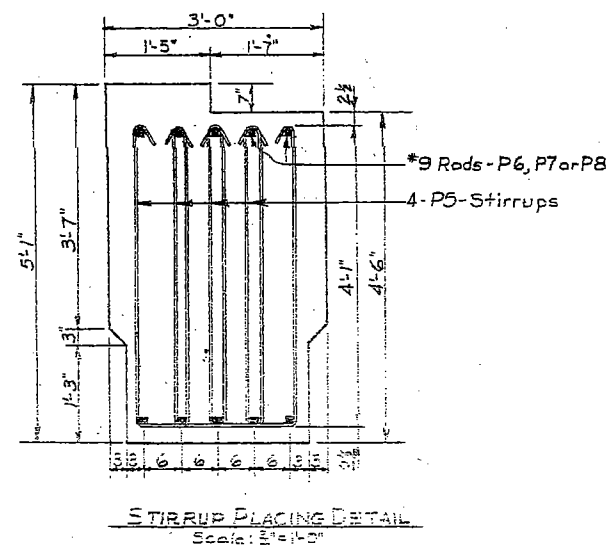
Note: For bending details see sheet 8 of 9



EAST ABUTMENT EXTENSION



Note: New 91' section to be built as shown for 39' section except to be continuous for 6 arches.



Note: Bar list & details shown on sheet 8 of 8.

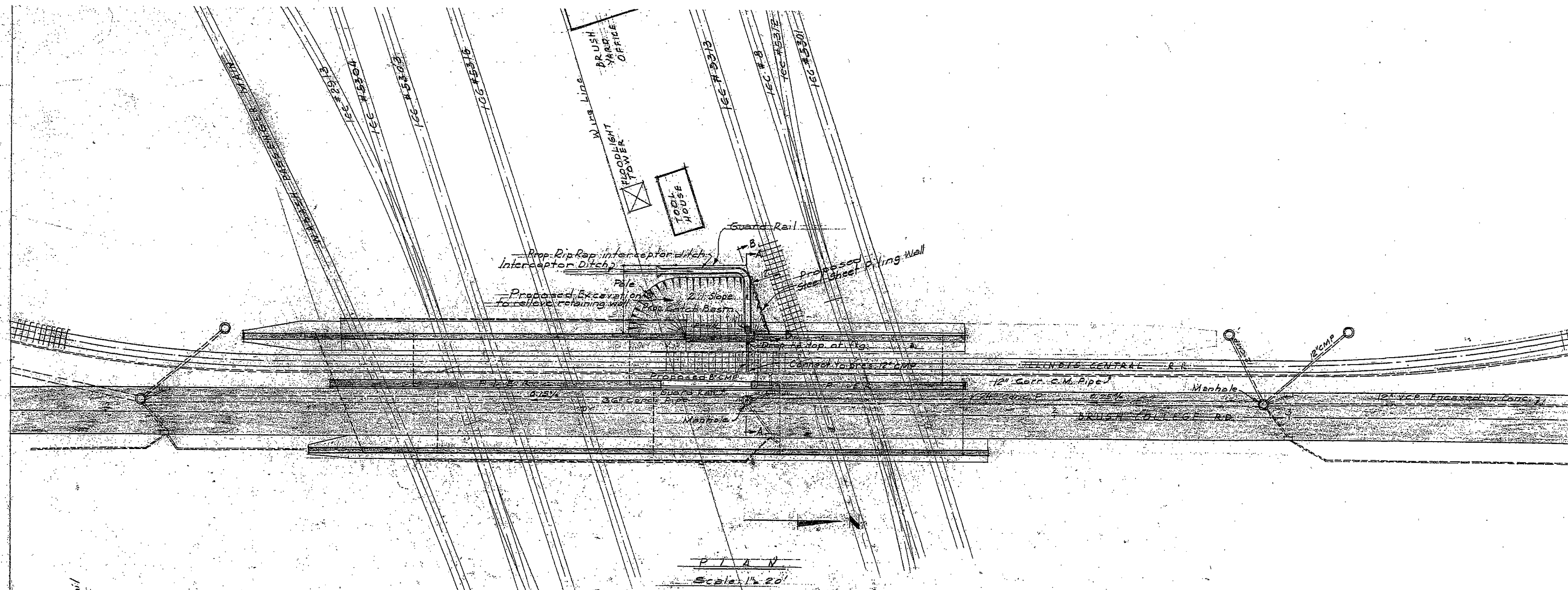
A. E. E. NO. _____ DATE COMPLETED _____

WABASH RAILROAD COMPANY
 OFFICE OF CHIEF ENGINEER

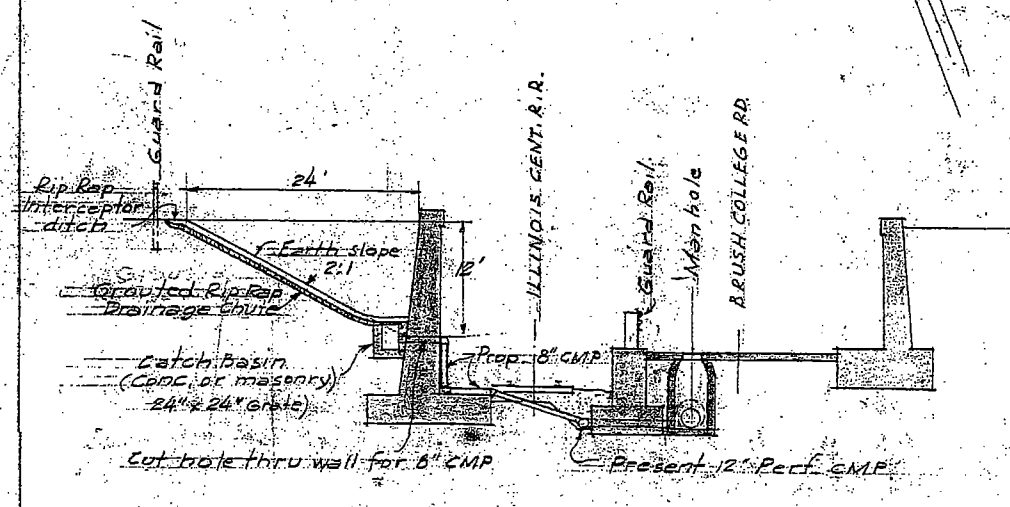
STRUCTURE: BRUSH COLLEGE ROAD BRIDGE EXT.

LOCATION: DECATUR, ILL.

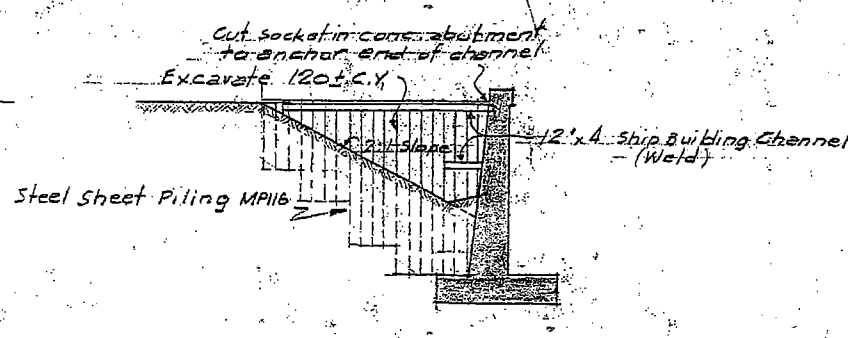
DRAWN BY: _____



PLAN
Scale 1" = 20'



SECTION A-A
Scale 1" = 10'



SECTION B-B
Scale 1" = 10'

WORK TO BE DONE
Drive sheet piling as shown, excavate to relieve pressure on west abutment, provide drainage, and construct guard rail.

ESTIMATED QUANTITIES		
ITEM	UNIT	AMOUNT
Excavation	C.Y.	120
Sheet Piling MP116	lb.	8000
Struct. steel	"	1000
Concrete	C.Y.	10
Grouted Rip Rap	C.Y.	5.0
8" GALV. CORR	LF	22

BRUSH RAILROAD COMPANY
OFFICE OF CHIEF ENGINEER

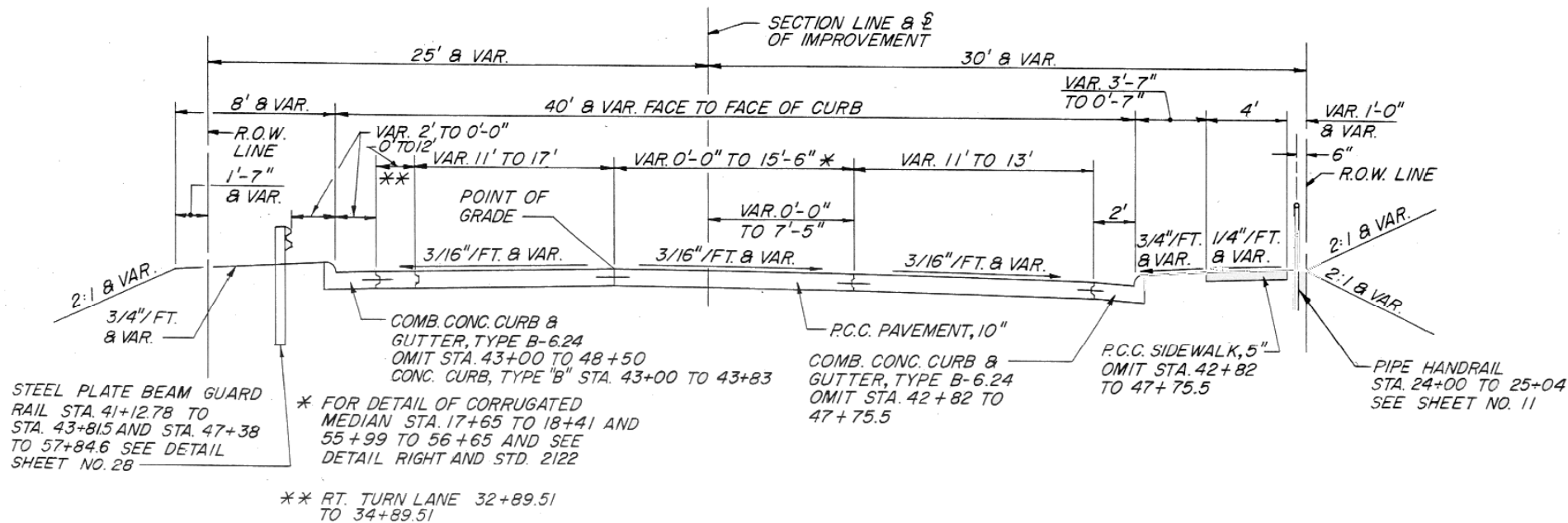
STRUCTURE BRUSH COLLEGE ROAD UNDER

LOCATION DECATUR, ILL.

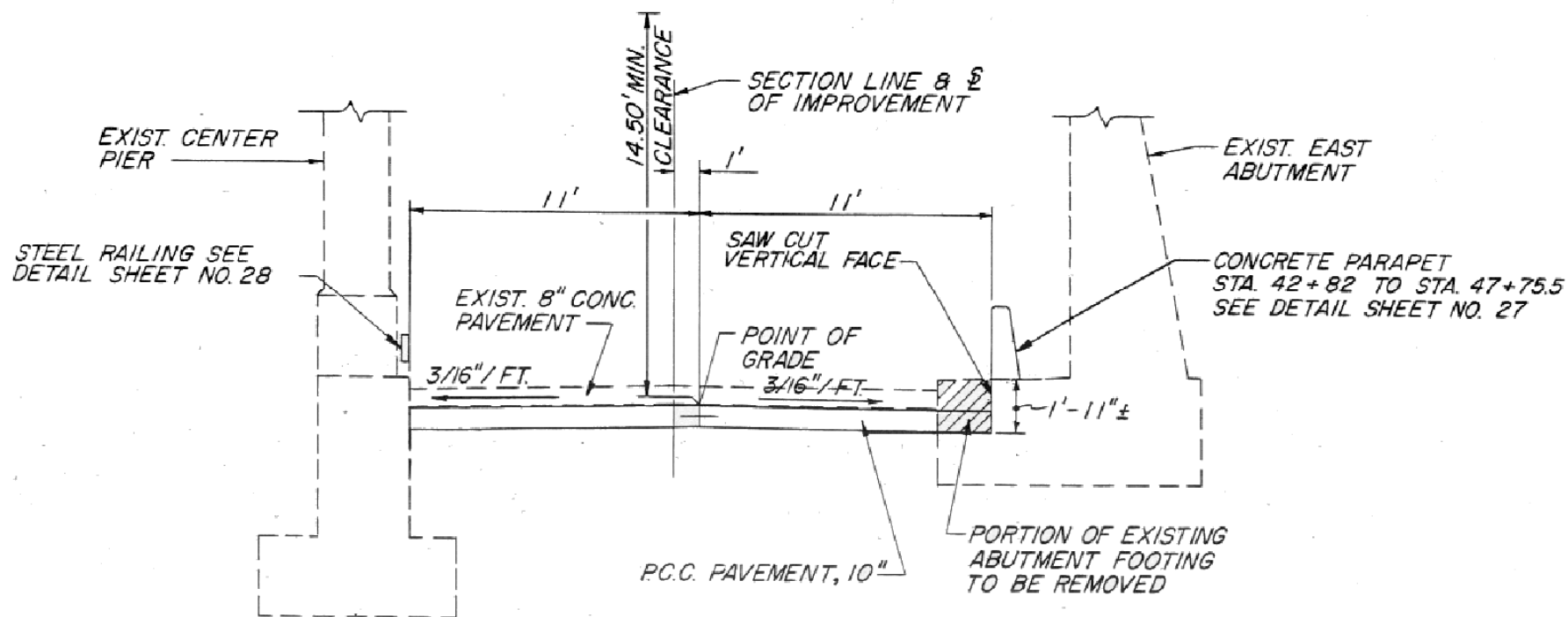
DATE DEC 1912 Old No. 1112

EXHIBIT 3

EXISTING TYPICAL CROSS SECTIONS



EXISTING TYPICAL CROSS SECTION
BRUSH COLLEGE ROAD FROM
WILLIAM STREET TO FARIES PARKWAY



EXISTING TYPICAL CROSS SECTION
RAILROAD STRUCTURE CARRYING NSRR
OVER BRUSH COLLEGE ROAD

EXHIBIT 4
TRAFFIC ANALYSIS



BERNS, CLANCY AND ASSOCIATES

PROFESSIONAL CORPORATION

ENGINEERS • SURVEYORS • PLANNERS

THOMAS B. BERNs
EDWARD L. CLANCY
CHRISTOPHER BILLING

DONALD WAUTHIER

BRIAN CHAILLE
DENNIS CUMMINS
JENNIFER SELBY
HEATHER SULLIVAN

MICHAEL BERNs
OF COUNSEL

March 31, 2005

BRUSH COLLEGE ROAD TRAFFIC PLANNING STUDY CITY OF DECATUR, MACON COUNTY, ILLINOIS

Berns, Clancy and Associates (BCA) was retained to assist Blank, Wesselink, Cook and Associates, Engineers (BWC) with regard to traffic forecasting and analysis for the planning level study of Brush College Road. Background information was obtained from a variety of sources by BWC and provided to BCA. Information included: prior Intersection Design Studies for William Street / Brush College Road and Faries Parkway / Brush College Road intersections; Plan / Profile Sheets for Brush College Road; available aerial photography of the site; current and some historic traffic counts and projections; municipal land use plan; and notes from various meetings.

TRAFFIC PROJECTIONS

From the available data, BCA prepared projections of Average Daily Traffic for the current, 10-year and 20-year future traffic for the four (4) legs of the two (2) intersections of Brush College / Faries and Brush College / William. A summary of these projections is appended.

BRUSH COLLEGE ROAD / FARIES PARKWAY INTERSECTION

Based on observation and discussions with knowledgeable parties, this intersection appears to function adequately under present conditions. It has been identified that railroad operations in the area do have significant impact on intersection operations. The public road authority should work with the railroad and industries to minimize operations across the grade crossings during peak traffic hours.

BRUSH COLLEGE / WILLIAM STREET INTERSECTION

The majority of complaints, and direct observation, indicate that the Brush College / William intersection perform inadequately during peak hours—particularly the north leg. The afternoon grade school traffic on Brush College north of William and the PM peak traffic were particularly problematic. The existing 200 foot long turn lanes on the north approach to the intersection are inadequate and do not allow the approaching traffic adequate access to the intersection to take full advantage of the available signal timing.

The recommended intersection improvements we analyzed included the addition of a new dedicated left turn lane and extension of the approach lanes to a total of 600 feet on the north side of the intersection. A total of three (3) southbound approach lanes on the north leg are as follows: left only; left / through; right only. Requisite minor geometric improvements are needed on the other three (3) legs of the intersection to match.

We performed a planning level traffic analysis of the intersection to evaluate the potential improvement with the recommended improvements in accordance with Highway Capacity Manual procedures. Based on the information available, highway capacity software was used to evaluate the two (2) conditions with the only difference between the existing and proposed conditions being the additional southbound left-turn lane. The brief summary report of the two (2) final runs are appended. The Level of Service for the north leg could improve from an LOS of F to a LOS of C by the addition of the recommended improvements. Signal timing could be adjusted to spread some this improvement to other legs of the intersection.

Detailed intersection designs and signal timing should be based on more representative or "actual" traffic data which should be acquired for a design level analysis. But from just a planning level of analysis, it is apparent that the recommended improvements would greatly relieve traffic congestion at this intersection.

RAILROAD VIADUCT IMPACTS

Presently, the existing traffic capacity does not appear to be impacted by the narrow 2-lane cross section of Brush College Road at the railroad viaduct. The intersections along this segment of Brush College Road have a more constraining influence. The question to address is the increasing traffic in the future. Will the viaduct become a limitation as future traffic volumes grow?

The Highway Capacity Manual contains procedures for evaluating capacity of road segments. The "Urban Arterial" module of the highway capacity software was used to evaluate any changes in anticipated capacity at the viaduct due to increases in traffic. Information from the intersection analysis at William Street was used as well as the anticipated traffic increases from the initial traffic projections. The summary output from the "current traffic" and the "20 years future traffic" analyses are appended. There is no change to the traffic capacity at the viaduct due to increases of traffic 20 years into the future. The intersections will remain the limiting factors along this segment of Brush College Road.

SUMMARY

From this planning level analysis, improvements are recommended only at the intersection of Brush College Road and William Street. From a capacity standpoint, the existing intersection at Faries Parkway and the reduced lane width at the railroad viaduct do not appear to impact the capacity of this segment of Brush College Road.

When a design level analysis for the new intersection improvements at Brush College Road and William Street is undertaken, current traffic counts should be taken so the analysis can be specifically tailored to existing, and anticipated future conditions. Any jurisdictional questions, or constraints, between differing roadway agencies should be addressed prior to any continuing analysis.

Sincerely,
BERNS, CLANCY AND ASSOCIATES, P.C.

Chris Billing

Chris Billing, P.E., Vice President

BERNS, CLANCY AND ASSOCIATES



**BERNS, CLANCY AND ASSOCIATES**

PROFESSIONAL CORPORATION

ENGINEERS • SURVEYORS • PLANNERSTHOMAS B. BERNs
EDWARD L. CLANCY
CHRISTOPHER BILLING

DONALD WAUTHIER

BRIAN CHAILLE
DENNIS CUMMINS
JENNIFER SELBY
HEATHER SULLIVANMICHAEL BERNs
OF COUNSEL

March 31, 2005

**BRUSH COLLEGE ROAD TRAFFIC STUDY
CITY OF DECATUR, MACON COUNTY, ILLINOIS****ADT TRAFFIC FORECASTS****BRUSH COLLEGE ROAD AND FARIES PARKWAY ADT**

INTERSECTION LEG	2005	2015	2025
NORTH	17,300	19,000	20,700
WEST	9,800	10,700	11,700
SOUTH	16,900	18,600	20,300
EAST	5,000	5,600	6,100

BRUSH COLLEGE ROAD AND WILLIAM STREET ADT

INTERSECTION LEG	2005	2015	2025
NORTH	11,900	12,600	13,300
WEST	13,100	14,300	15,500
SOUTH	1,200	1,200	1,300
EAST	14,200	16,100	18,000

CB:lm

J:\5422\5422 ADT Traffic Forecasts.doc

✕ 405 EAST MAIN STREET • POST OFFICE BOX 755 • URBANA, IL 61803-0755 • 217/384-1144 • FAX 217/384-3355
□ 28 WEST NORTH STREET • 301 THORNTON BLDG • DANVILLE, IL 61832-5729 • 217/431-1144 • FAX 217/431-2929

SUMMARY OUTPUT
BRUSH COLLEGE / WILLIAM INTERSECTION
EXISTING GEOMETRIC CONDITIONS

5422ecnd

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

INTERSECTION..William/Brush College
AREA TYPE.....OTHER
ANALYST.....Chris Billing
DATE.....03-28-2005
TIME.....PM Peak
COMMENT.....Estimated traffic data

VOLUMES					GEOMETRY							
	EB	WB	NB	SB	:	EB	WB	NB	SB			
LT	315	310	20	480	: L	12.0	12.0	12.0		LT	12.0	
TH	670	385	30	35	: T	12.0	12.0	12.0		R	12.0	
RT	35	5	20	480	: TR	12.0	12.0	12.0			12.0	
RR	30	5	15	150	:	12.0	12.0	12.0			12.0	
					:	12.0	12.0	12.0			12.0	
					:	12.0	12.0	12.0			12.0	

ADJUSTMENT FACTORS									
	GRADE	HV	ADJ	PKG	BUSES	PHF	PEDS	PED. BUT.	ARR. TYPE
	(%)	(%)	Y/N	Nm	Nb			Y/N	min T
EB	0.00	5.00	N	0	2	0.90	5	N	16.8
WB	0.00	5.00	N	0	2	0.90	5	N	16.8
NB	0.00	0.00	N	0	0	0.90	0	N	28.8
SB	0.00	5.00	N	0	2	0.90	0	N	28.8

SIGNAL SETTINGS								CYCLE LENGTH = 84.0			
	PH-1	PH-2	PH-3	PH-4		PH-1	PH-2	PH-3	PH-4		
EB LT	X	X			NB LT					X	
TH	X	X			TH					X	

Page 1



BERNS, CLANCY AND ASSOCIATES, P.C.
ENGINEERS • SURVEYORS • PLANNERS
405 EAST MAIN STREET - POST OFFICE BOX 756
URBANA, ILLINOIS 61803-0756
PHONE: 217/384-1444 - FAX: 217/384-3355

SHEET 1 OF 8 DATE 3-31-05 JOB: 5422

SUMMARY OUTPUT
BRUSH COLLEGE / WILLIAM INTERSECTION
EXISTING GEOMETRIC CONDITIONS

5422ecnd

RT	X	X	X		RT				X
PD					PD				
WB	LT		X		SB	LT		X	X
	TH		X			TH		X	X
	RT		X		RT	X		X	X
	PD				PD				
GREEN	8.0	6.0	18.0	4.0	GREEN	8.0	6.0	18.0	4.0
YELLOW	0.0	3.0	0.0	3.0	YELLOW	0.0	3.0	0.0	3.0

		LEVEL OF SERVICE					
LANE	GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	1.664	0.167	*	*	*	*
	TR	1.352	0.167	*	*		
WB	L	4.122	0.071	*	*	*	*
	T	1.792	0.071	*	*		
	R	0.000	0.357	0.0	A		
NB	LTR	0.798	0.048	49.4	E	49.4	E
SB	LT	1.460	0.262	*	*	*	*
	R	0.594	0.417	13.2	B		

INTERSECTION: Delay = * (sec/veh) V/C = 1.052 LOS = * □

1985 HCM: SIGNALIZED INTERSECTIONS

Page-1

IDENTIFYING INFORMATION

=====

NAME OF THE EAST/WEST STREET..... William

Page 2



BERNS, CLANCY AND ASSOCIATES, P.C.
ENGINEERS • SURVEYORS • PLANNERS
405 EAST MAIN STREET - POST OFFICE BOX 755
URBANA, ILLINOIS 61803-0755
PHONE: 217/384-1444 - FAX: 217/384-3366

SHEET 2 OF 8 DATE 3-31-65 JOB: 5422

SUMMARY OUTPUT BRUSH COLLEGE / WILLIAM INTERSECTION PROPOSED GEOMETRIC CONDITIONS

5422pcnd

1985 HCM: SIGNALIZED INTERSECTIONS
SUMMARY REPORT

INTERSECTION..William/Brush College
AREA TYPE.....OTHER
ANALYST.....Chris Billing
DATE.....03-28-2005
TIME.....PM Peak
COMMENT.....Estimated traffic data

	VOLUMES					GEOMETRY					
	EB	WB	NB	SB		EB	WB	NB	SB		
LT	315	310	20	480	: L	12.0	L	12.0	LTR	12.0	L
TH	670	385	30	35	: T	12.0	T	12.0		12.0	LT
RT	35	5	20	480	: TR	12.0	T	12.0		12.0	R
RR	30	5	15	150	:	12.0	R	12.0		12.0	
					:	12.0		12.0		12.0	
					:	12.0		12.0		12.0	

	ADJUSTMENT FACTORS								
	GRADE	HV	ADJ	PKG	BUSES	PHF	PEDS	PED. BUT.	ARR. TYPE
	(%)	(%)	Y/N	Nm	Nb			Y/N	min T
EB	0.00	5.00	N	0	2	0.90	5	N	19.8
WB	0.00	5.00	N	0	2	0.90	5	N	19.8
NB	0.00	0.00	N	0	0	0.90	0	N	28.8
SB	0.00	5.00	N	0	2	0.90	0	N	28.8

SIGNAL SETTINGS

CYCLE LENGTH = 84.0

	PH-1	PH-2	PH-3	PH-4		PH-1	PH-2	PH-3	PH-4
EB LT	X	X			NB LT				X
TH	X	X			TH				X



SUMMARY OUTPUT BRUSH COLLEGE / WILLIAM INTERSECTION PROPOSED GEOMETRIC CONDITIONS

5422pcnd

RT	X	X	X		RT				X
PD					PD				
WB LT		X			SB LT	X		X	X
TH		X			TH			X	X
RT		X			RT			X	X
PD					PD				
GREEN	8.0	6.0	18.0	4.0	GREEN	8.0	6.0	18.0	4.0
YELLOW	0.0	3.0	0.0	3.0	YELLOW	0.0	3.0	0.0	3.0

		LEVEL OF SERVICE					
LANE	GRP.	V/C	G/C	DELAY	LOS	APP. DELAY	APP. LOS
EB	L	1.664	0.167	*	*	*	*
	TR	1.352	0.167	*	*		
WB	L	4.122	0.071	*	*	*	*
	T	1.792	0.071	*	*		
	R	0.000	0.143	0.0	A		
NB	LTR	0.798	0.048	49.4	E	49.4	E
SB	L	0.386	0.357	15.6	C	18.8	C
	LT	0.625	0.262	19.3	C		
	R	0.770	0.321	21.0	C		

INTERSECTION: Delay = * (sec/veh) V/C = 0.797 LOS = * □

1985 HCM: SIGNALIZED INTERSECTIONS

Page-1

IDENTIFYING INFORMATION

=====

Page 2



BERNS, CLANCY AND ASSOCIATES, P.C.
ENGINEERS • SURVEYORS • PLANNERS
405 EAST MAIN STREET - POST OFFICE BOX 756
URBANA, ILLINOIS 61803-0756
PHONE: 217/384-1444 - FAX: 217/384-3356

SHEET 4 OF 8 DATE 3-31-05 JOB: 5422

RAILROAD VIADUCT CAPACITY ANALYSIS EXISTING TRAFFIC

Recond

1985 HCM: URBAN AND SUBURBAN ARTERIALS

Page-1

ARTERIAL DESCRIPTION

NAME OF THE ARTERIAL FACILITY..... Brush College Road
 ARTERIAL CLASS OF THE FACILITY..... 3
 NUMBER OF SEGMENTS ON THE ARTERIAL.. 1
 OTHER INFORMATION..... Review at Railroad Overpass

ARTERIAL SUMMARY OF INTERSECTION DELAY ESTIMATES

				FOR LANE GROUP WITH		INITIAL PROGRESSION		ADJ.	EST.	
CYCLE		THROUGH MOVEMENT:		STOP	FACTOR	STOP	INT	APP.		
SEQ.	LEN.	g/C	v/c	CAPACITY	DELAY	(TABLE 11-6)	DELAY	LOS	DELAY	
1	84.0	0.262	0.625	460	22.7	1.00	22.7	C	29.5	

COMPUTATION OF ARTERIAL LEVEL OF SERVICE WORKSHEET

Page-2

SEGMENT	FREE	RUNNING	TIME	INT.	APP.	OTHER	SUM OF		
LENGTH	ART.	FLOW	(sec.)	DELAY	DELAY	DELAY	TIME	SPD.	SEG.
SEG. (ft mi)	CLASS	(mph)	(TABLE 11-3)	(sec)	(sec)	(sec)	(mph)	LOS	

Page 1



BERNS, CLANCY AND ASSOCIATES, P.C.
 ENGINEERS • SURVEYORS • PLANNERS
 405 EAST MAIN STREET - POST OFFICE BOX 766
 URBANA, ILLINOIS 61803-0766
 PHONE: 217/384-1144 - FAX: 217/384-3366

SHEET 5 of 8	DATE 3-2-85	JOB: 5422
--------------	-------------	-----------

RAILROAD VIADUCT CAPACITY ANALYSIS EXISTING TRAFFIC

				Rrecond					
1	3000	3	30	68.7	29.5	0.0	98.2	20.8	B

Grand Sum of Time	=	98.15 sec.	Average Speed	20.8
Grand Sum of Length	=	0.57 mi.	Overall LOS	= B

IDENTIFYING INFORMATION

NAME OF THE ARTERIAL FACILITY..... Brush College Road
OTHER INFORMATION..... Review at Railroad Overpass



BERNS, CLANCY AND ASSOCIATES, P.C.
ENGINEERS • SURVEYORS • PLANNERS
405 EAST MAIN STREET - POST OFFICE BOX 756
URBANA, ILLINOIS 61803-0756
PHONE: 217/384-1144 - FAX: 217/384-3355

SHEET 6 OF 8	DATE 3-31-67	JOB: 5422
--------------	--------------	-----------

RAILROAD VIADUCT CAPACITY ANALYSIS 20 YEARS FUTURE TRAFFIC

Rr20cond

1985 HCM: URBAN AND SUBURBAN ARTERIALS

Page-1

ARTERIAL DESCRIPTION

NAME OF THE ARTERIAL FACILITY..... Brush College Road
 ARTERIAL CLASS OF THE FACILITY..... 3
 NUMBER OF SEGMENTS ON THE ARTERIAL.. 1
 OTHER INFORMATION..... Review at Railroad overpass, 20 years future

ARTERIAL SUMMARY OF INTERSECTION DELAY ESTIMATES

FOR LANE GROUP WITH INITIAL PROGRESSION ADJ. EST.									
CYCLE		THROUGH MOVEMENT:		STOP	FACTOR	STOP	INT	APP.	
SEQ.	LEN.	g/c	v/c	CAPACITY	DELAY	(TABLE 11-6)	DELAY	LOS	DELAY
1	84.0	0.262	0.625	510	22.5	1.00	22.5	C	29.2

COMPUTATION OF ARTERIAL LEVEL OF SERVICE WORKSHEET

Page-2

SEGMENT	FREE	RUNNING	TIME	INT.	APP.	OTHER	SUM OF	SEG.	
LENGTH	ART.	FLOW	(sec.)	DELAY	DELAY	DELAY	TIME	SPD.	SEG.
SEG. (ft mi)	CLASS	(mph)	(TABLE 11-3)	(sec)	(sec)	(sec)	(sec)	(mph)	LOS

Page 1



BERNS, CLANCY AND ASSOCIATES, P.C.
 ENGINEERS • SURVEYORS • PLANNERS
 405 EAST MAIN STREET - POST OFFICE BOX 756
 URBANA, ILLINOIS 61803-0756
 PHONE: 217/384-1144 - FAX: 217/384-3355

SHEET 7 of 8	DATE 3-31-05	JOB: 5422
--------------	--------------	-----------

RAILROAD VIADUCT CAPACITY ANALYSIS
20 YEARS FUTURE TRAFFIC

				Rr20cond					
1	3000	3	30	68.7	29.2	0.0	97.9	20.9	B

Grand Sum of Time = 97.92 sec. Average Speed 20.9
Grand Sum of Length = 0.57 mi. Overall LOS = B

IDENTIFYING INFORMATION

NAME OF THE ARTERIAL FACILITY..... Brush College Road
OTHER INFORMATION..... Review at Railroad overpass, 20 years future ☐



EXHIBIT 5

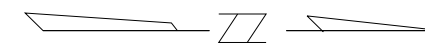
ALTERNATE LOCATION MAP



EXHIBIT 5
ALTERNATE LOCATION MAP

EXHIBIT 6

**BRUSH COLLEGE ROAD/WILLIAM
INTERSECTION MODIFICATIONS**



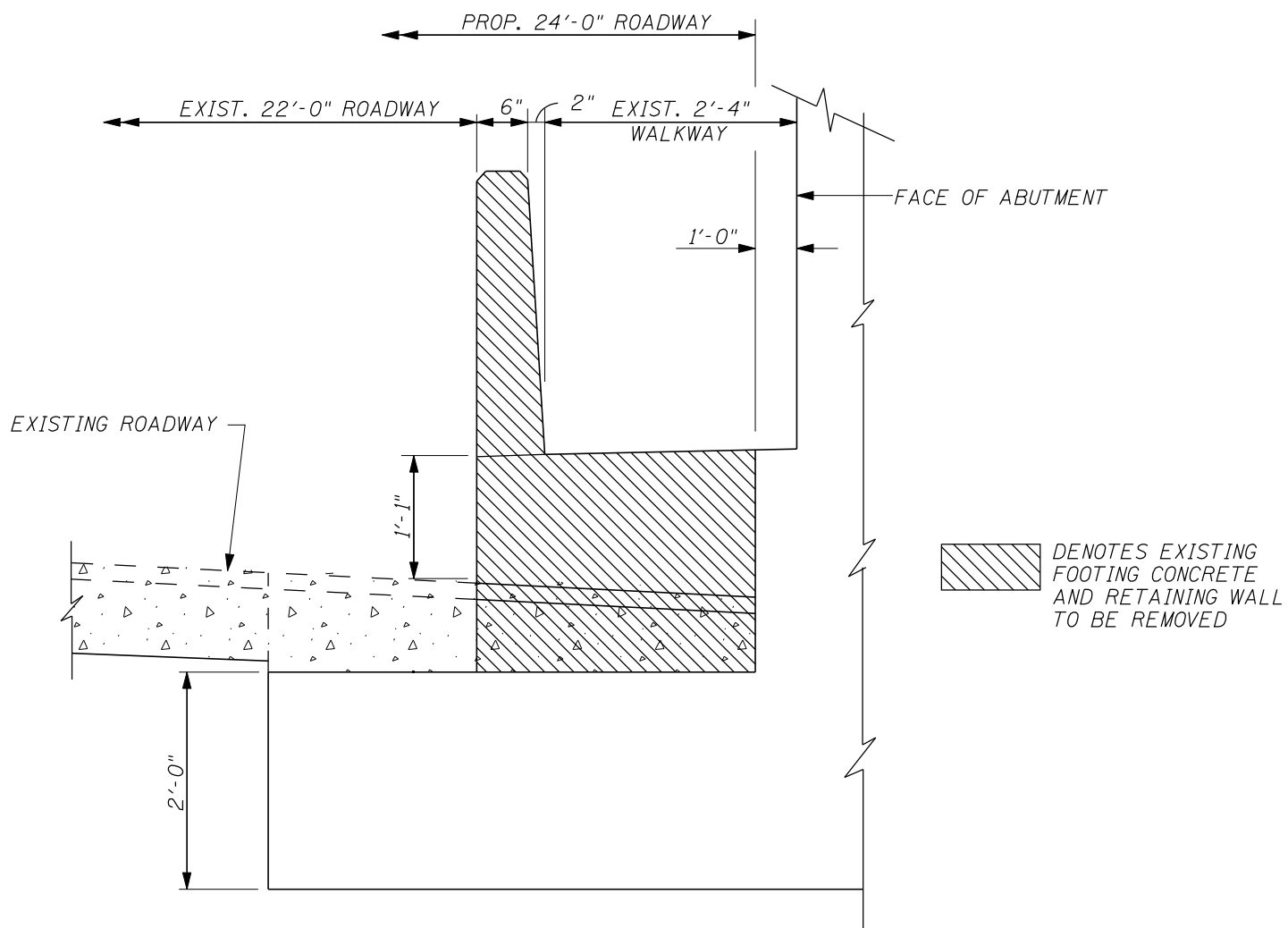
SCALE 1"=50'



EXHIBIT 6
BRUSH COLLEGE ROAD/
WILLIAM ST. INTERSECTION
MODIFICATION

EXHIBIT 7

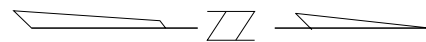
STRUCTURE MODIFICATIONS



SECTION AT EXISTING
ABUTMENT FOOTING
 LOOKING NORTH

EXHIBIT 8

**BRUSH COLLEGE ROAD
PROPOSED BRIDGE OVER RAILROAD**



SCALE 1"=200'



EXHIBIT 8
BRUSH COLLEGE ROAD
PROPOSED BRIDGE
OVER RAILROAD

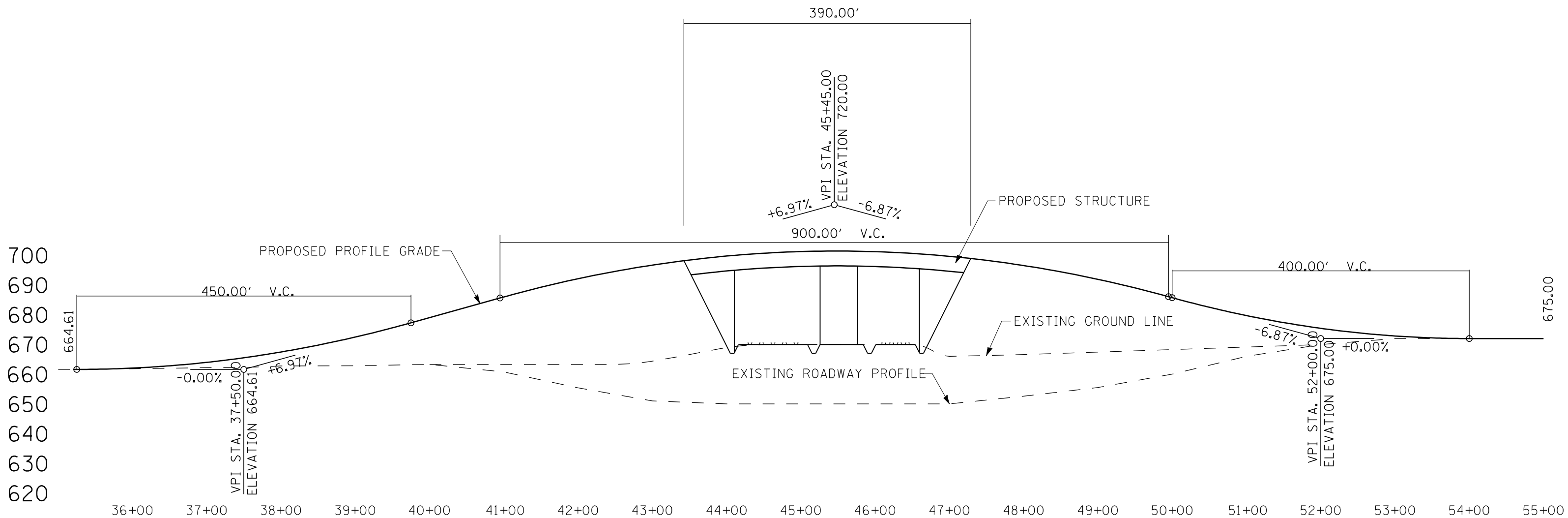
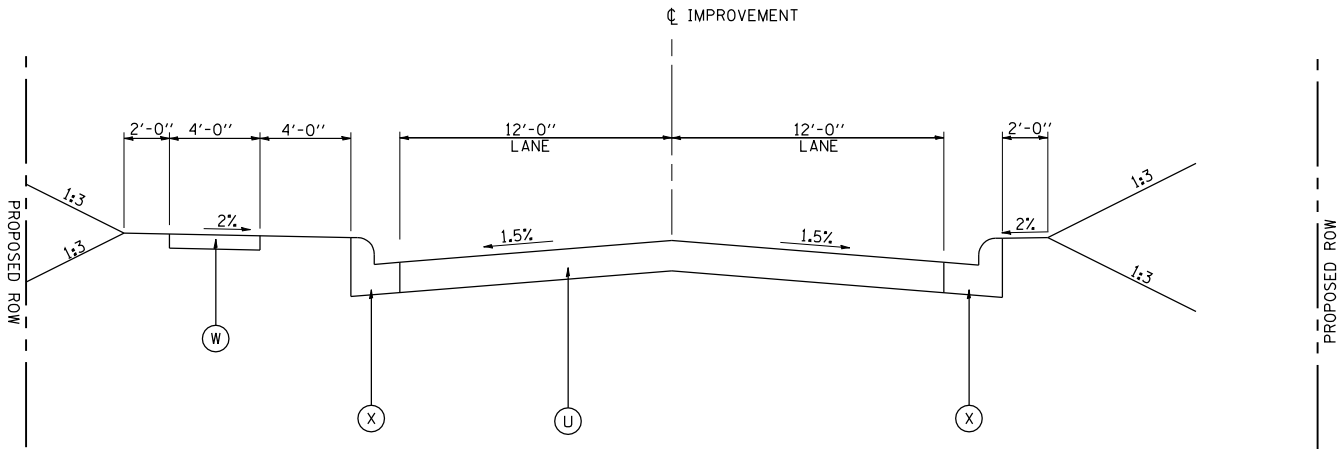


EXHIBIT 8
BRUSH COLLEGE ROAD
PROPOSED BRIDGE
OVER RAILROAD

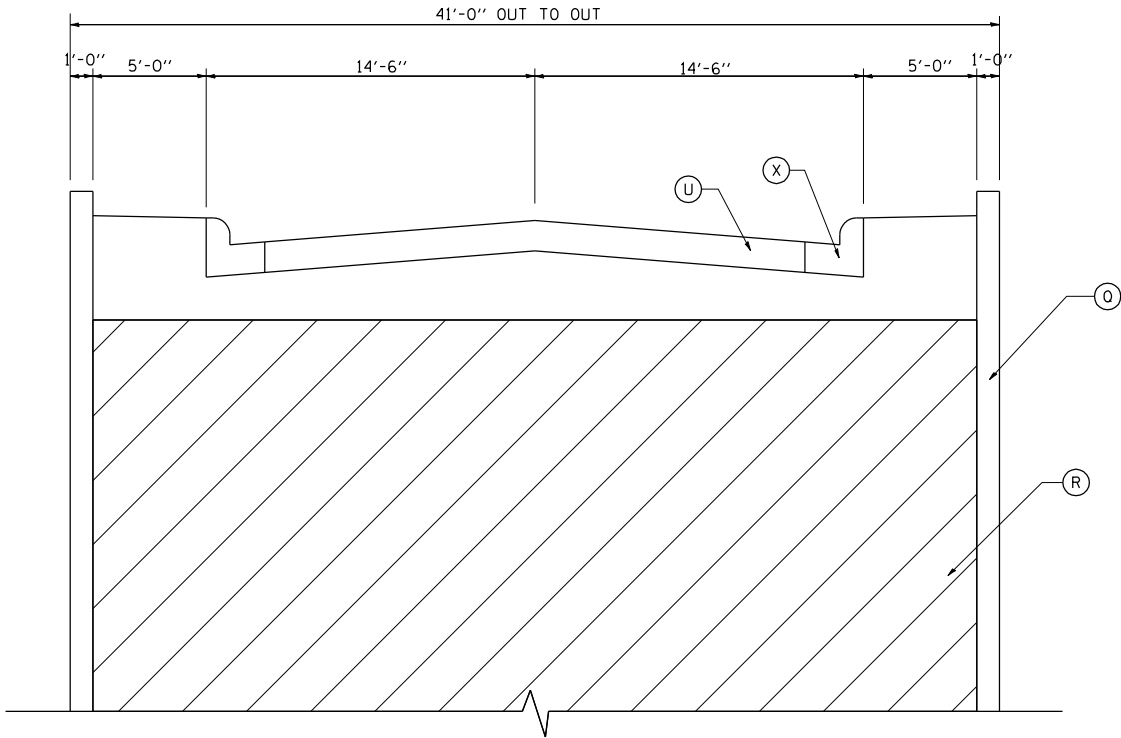
EXHIBIT 9

PROPOSED TYPICAL SECTIONS AND JAMES STREET PLAN AND PROFILES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MACON		
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL SECTION



PROPOSED TYPICAL SECTION

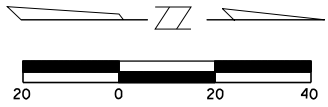
LEGEND

- (O) REINFORCED EARTH WALL
- (R) GRANULAR FILL
- (U) PCC PAVEMENT, 9¾", JOINTED
- (X) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (W) PCC SIDEWALK, 5"

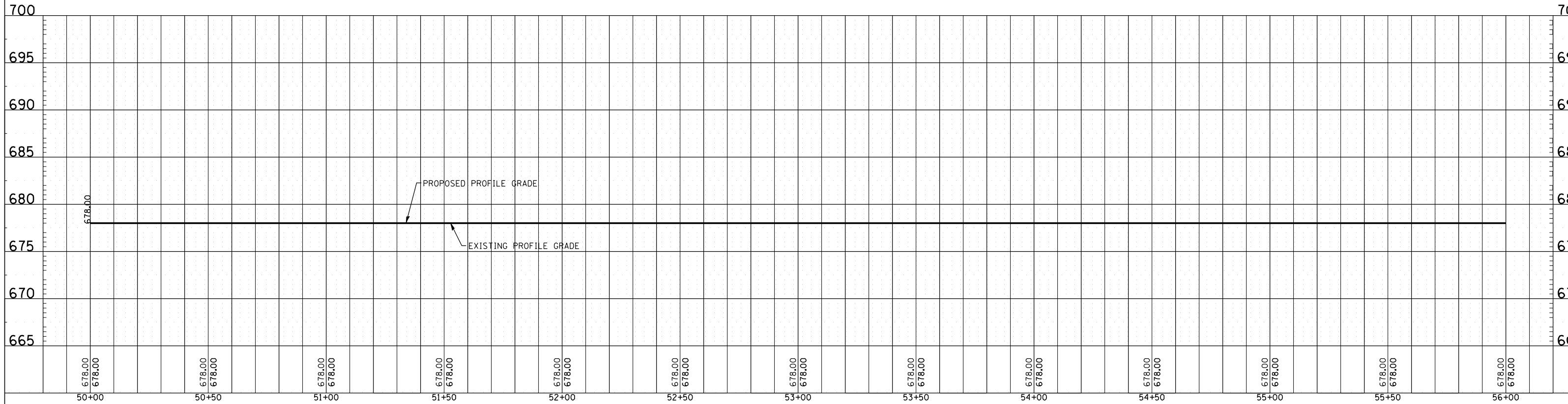
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE		
		PROPOSED TYPICAL SECTIONS	
SCALE: NONE		DRAWN BY MLO	
DATE		CHECKED BY	

PLAN	SURVEYED	ALIGNED	CHECKED	RT. OF WAY	CHECKED	FILE NAME
NO.						

PROF. FILE	SURVEYED	GRADES	CHECKED	B.M. NOTED	STRUCTURE	NOTATIONS	CHAD
NO.							

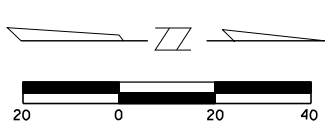


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
		MACON	
STA.	TO STA.		
FED. ROAD DIST. NO. .	ILLINOIS	FED. AID PROJECT	

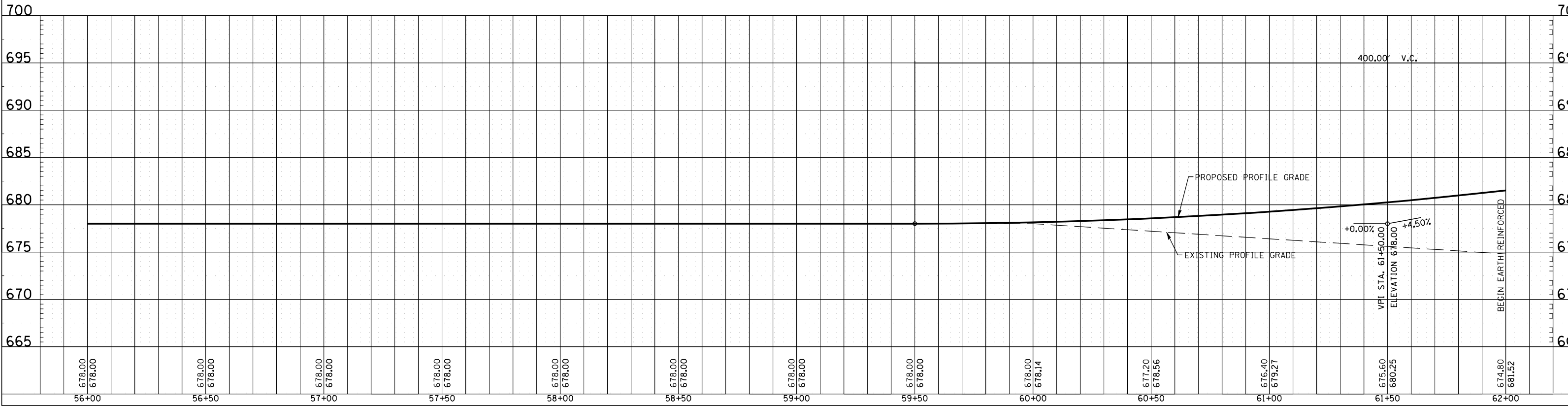


PLAN	SURVEYED	CHECKED	DATE
NO.	NO.	NO.	NO.
NOTE BOOK	ALIGNMENT	CHECKED	RT. OF WAY
NO.	NO.	NO.	NO.

PROF. FILE	SURVEYED	CHECKED	DATE
NO.	NO.	NO.	NO.
NOTE BOOK	GRADES	CHECKED	DATE
NO.	NO.	NO.	NO.

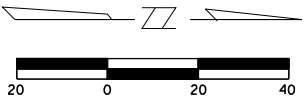


F.A. - RTE.	SECTION	COUNTY	TOTAL SHEETS
		MACON	
STA.	TO STA.		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT	

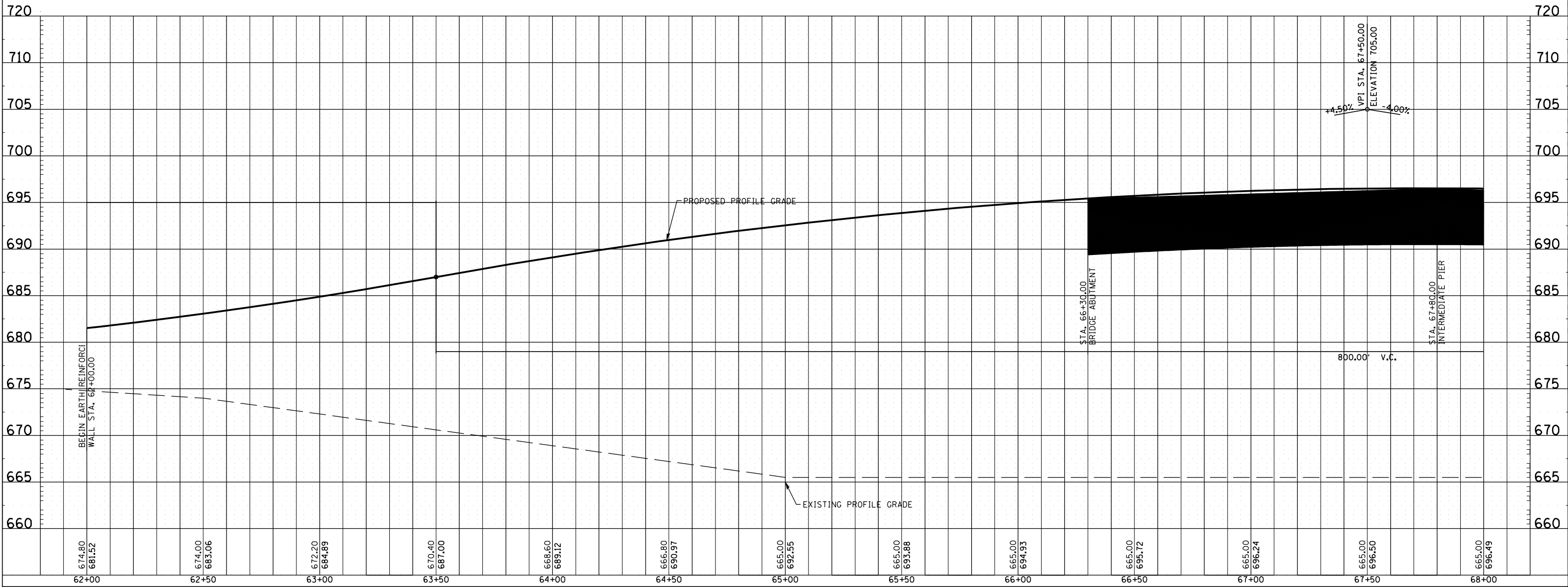


PLAN	SURVEYED	BY	DATE
NO.	PLOTTED		
	CHECKED		
	BY		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
NO.	PLOTTED		
	CHECKED		
	BY		
	NOTATIONS CHRD		



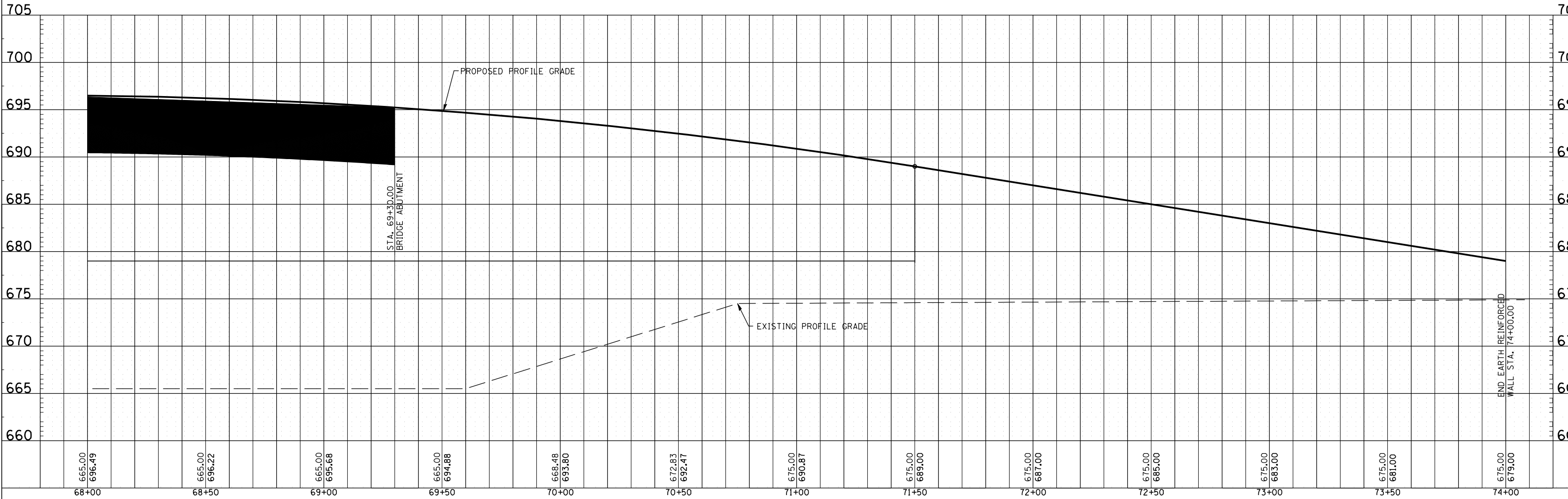
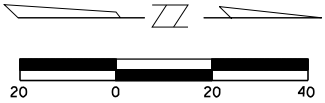
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MACON		
STA.	TO STA.			
FED. ROAD DIST. NO. .	ILLINOIS	FED. AID PROJECT		



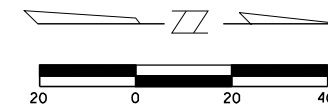
PLAN	SURVEYED	NOTED	NOTED
NO.	RT. OF WAY CHECKED	ALIGNED	GRADES CHECKED
	FILE NAME		

PROFILE	SURVEYED	NOTED	NOTED
NO.	RT. OF WAY CHECKED	ALIGNED	GRADES CHECKED
	FILE NAME		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
		MACON	
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



PROFILE	SURVEYED	
	PLOTTED	
NOTE BOOK	GRADES CHECKED	
	B.M. NOTED	
NO. _____	STRUCTURE NOTAT'NS CH'KD	



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	S
		MACON		
STA.		TO STA.		
FED. ROAD DIST. NO. .	ILLINOIS	FED. AID PROJECT		

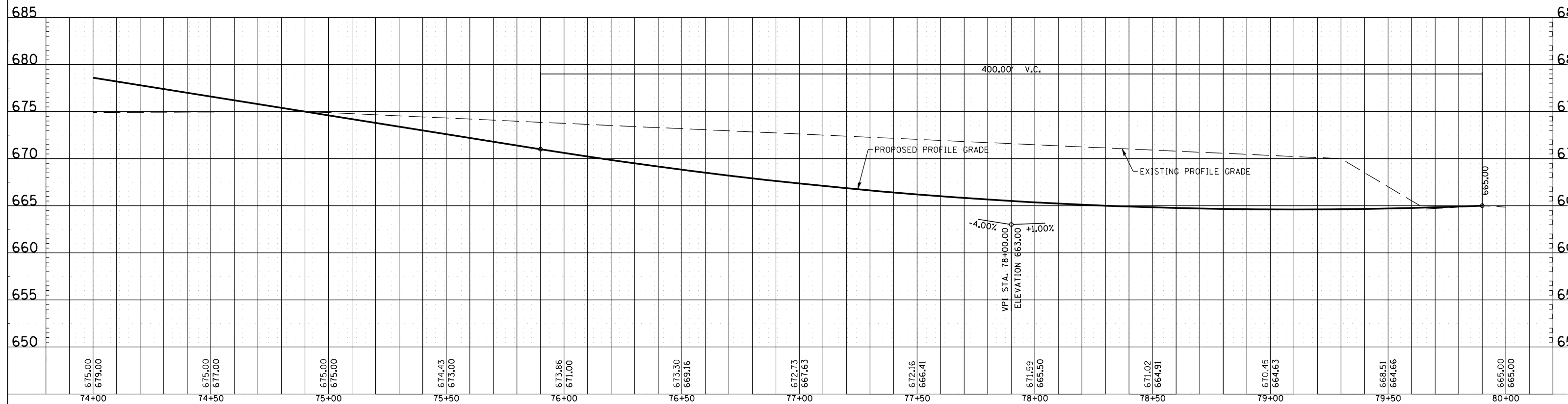
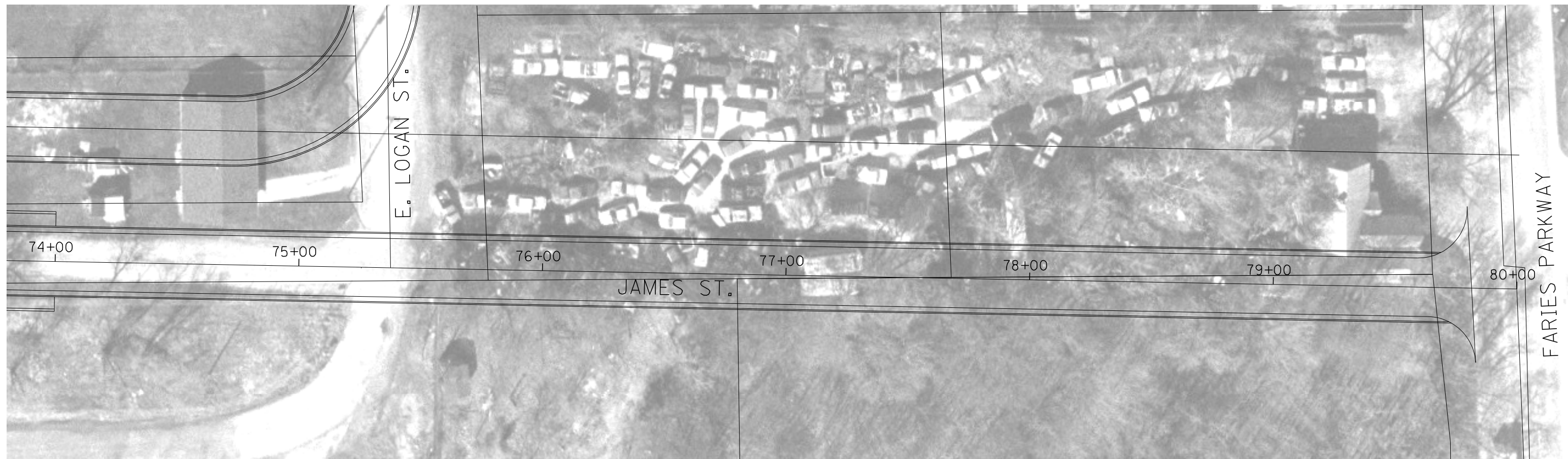
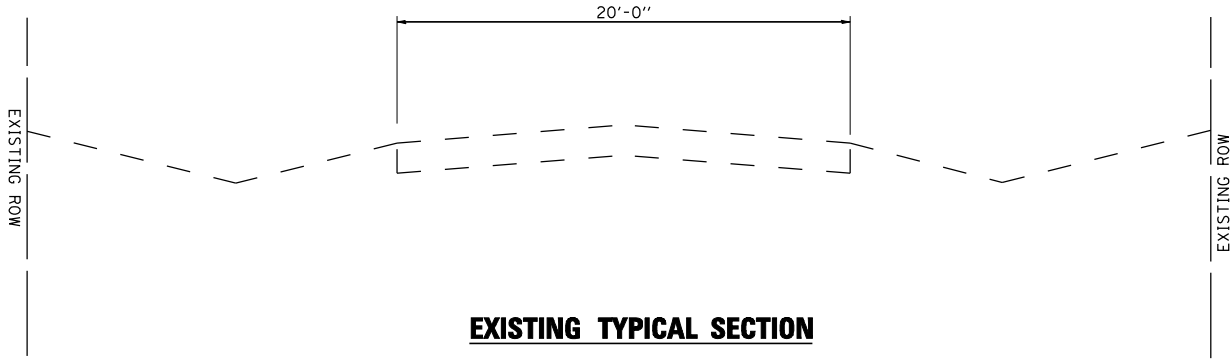


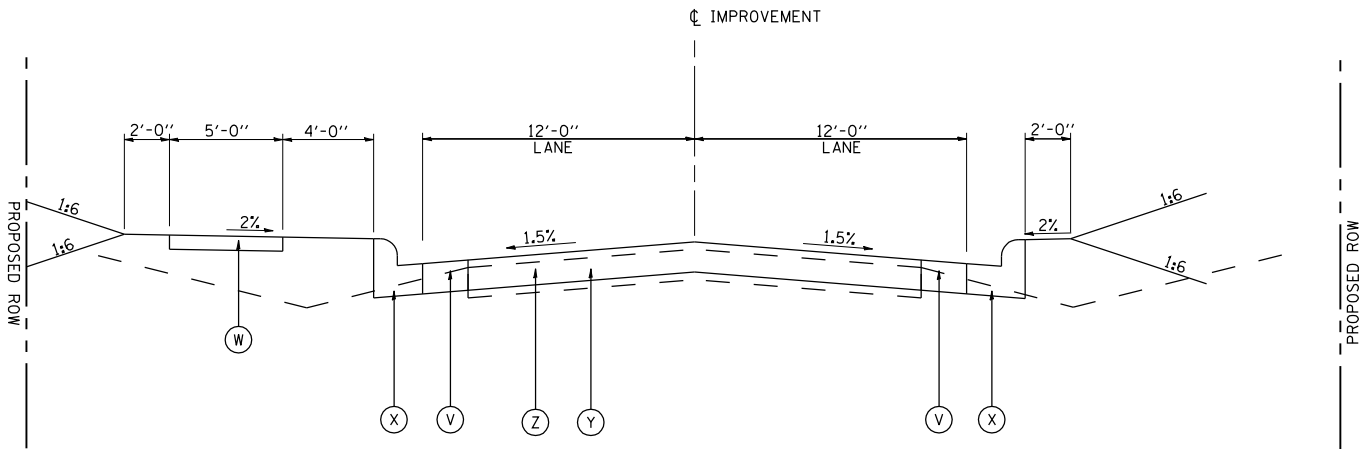
EXHIBIT 10

PROPOSED TYPICAL SECTIONS AND NICKEY AVENUE PLAN AND PROFILES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MACON		
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL SECTION



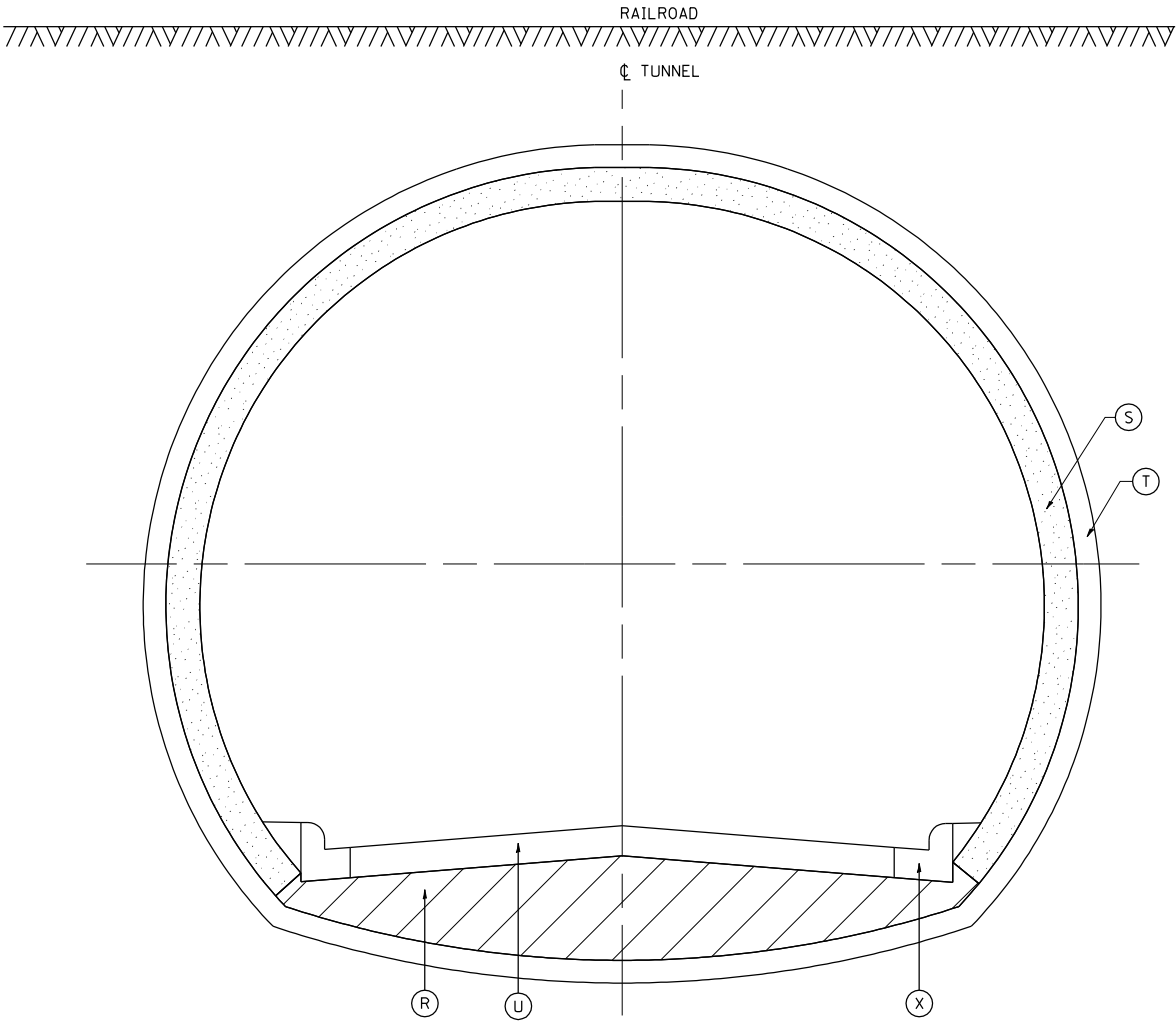
PROPOSED TYPICAL SECTION

LEGEND

- ⓪ PAVEMENT SURFACING
- Ⓢ EXISTING PAVEMENT
- ⓧ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- Ⓦ PCC SIDEWALK, 5"
- Ⓥ PAVEMENT WIDENING

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE		
		PROPOSED TYPICAL SECTIONS	
SCALE: NONE		DRAWN BY MLO	
DATE		CHECKED BY	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MACON		
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PROPOSED TUNNEL TYPICAL SECTION

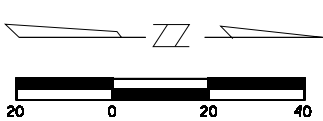
LEGEND

- (R) GRANULAR FILL
- (S) CONCRETE LINING
- (T) WATERPROOFING SYSTEM
- (U) PCC PAVEMENT, 9 3/4", JOINTED
- (X) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24

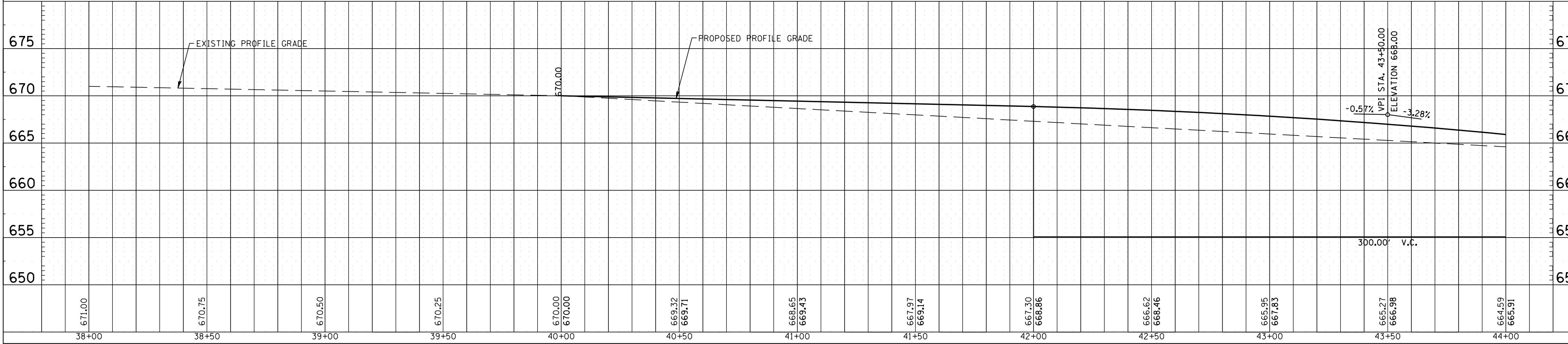
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		PROPOSED TYPICAL SECTION
SCALE: NONE		DRAWN BY MLO
DATE		CHECKED BY

PLAN	SURVEYED	ALIGNED	CHECKED	RT. OF WAY	CHECKED	FILE NAME
NO.	NOTE BOOK	NO.	NO.	NO.	NO.	NO.

PROF. FILE	SURVEYED	GRADES	CHECKED	B.M. NOTED	STRUCTURE	NOTATIONS	CHWD
NO.	NOTE BOOK	NO.	NO.	NO.	NO.	NO.	NO.

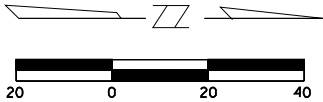


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
		MACON	
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

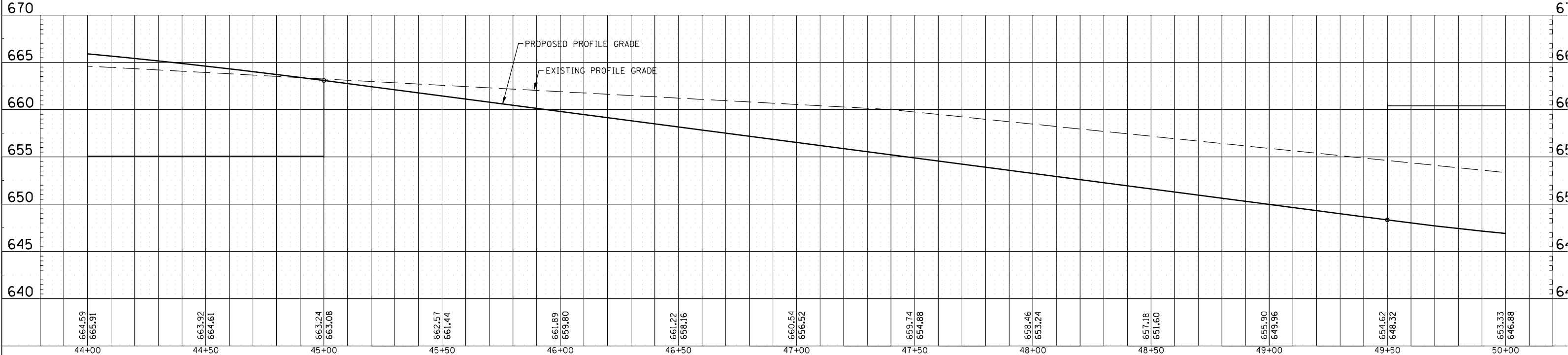
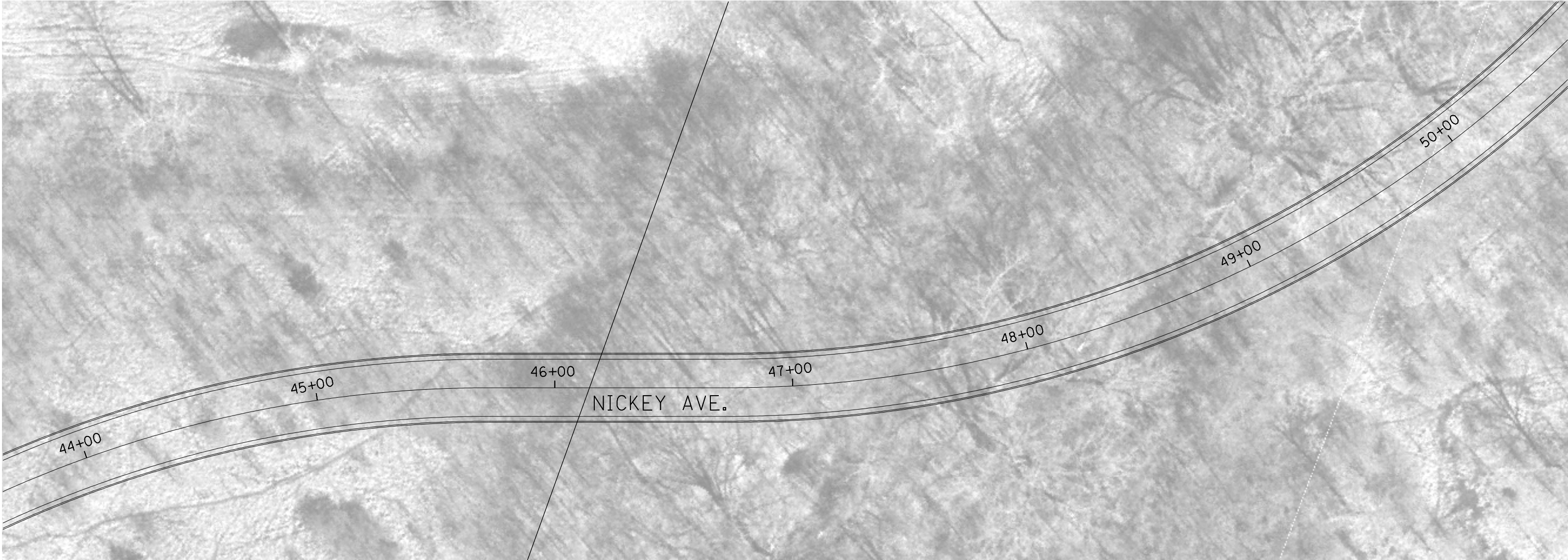


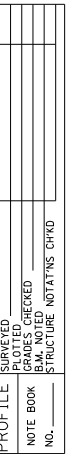
PLAN	SURVEYED	ALIGNED	CHECKED	RT. OF WAY	CHECKED	FILE NAME
NO.						

PROFILE	SURVEYED	GRADES	CHECKED	BM. NOTED	CHECKED	STRUCTURE	NOTATIONS	CHWD
NO.								



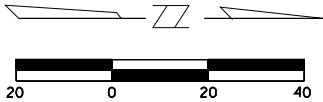
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
		MACON	
STA.	TO STA.		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT	





PLAN	SURVEYED	GRADES CHECKED	ALIGNMENT CHECKED	RT. OF WAY CHECKED	ROAD FILE NAME
NO.	NOTE BOOK	NO.	NO.	NO.	NO.

PROFILE	SURVEYED	GRADES CHECKED	STRUCTURE NOTATIONS CHKD
NO.	NOTE BOOK	NO.	NO.



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
		MACON	
STA.	TO STA.		
FED. ROAD DIST. NO. -	ILLINOIS	FED. AID PROJECT	

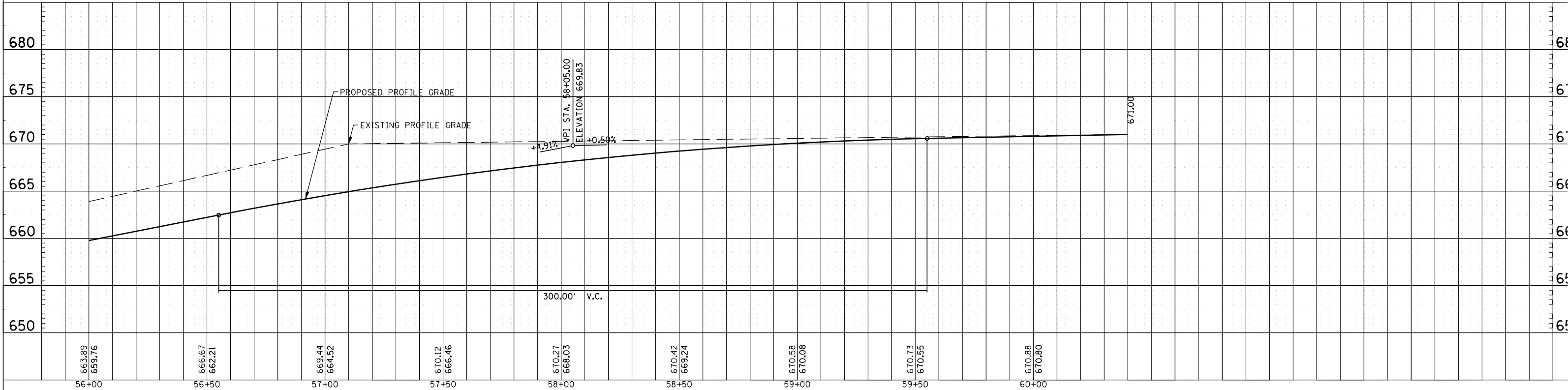
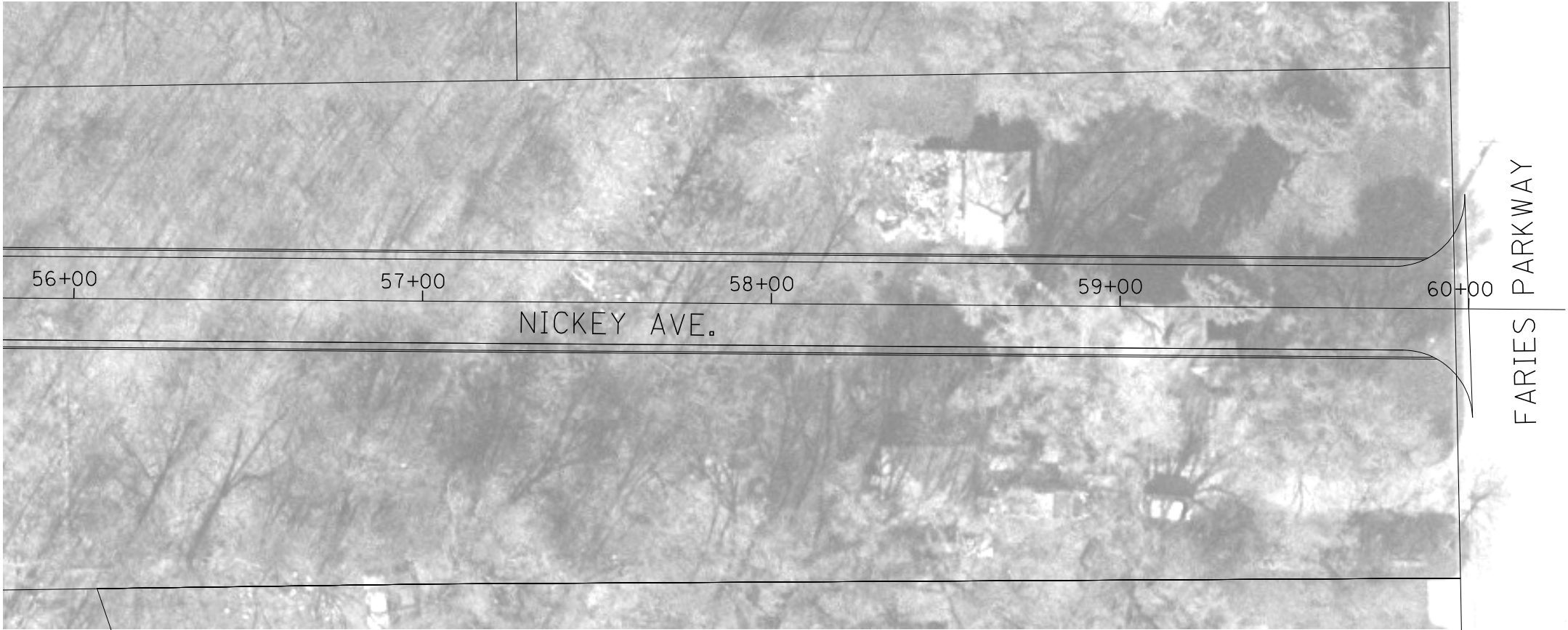
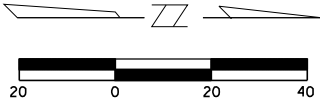


EXHIBIT 11

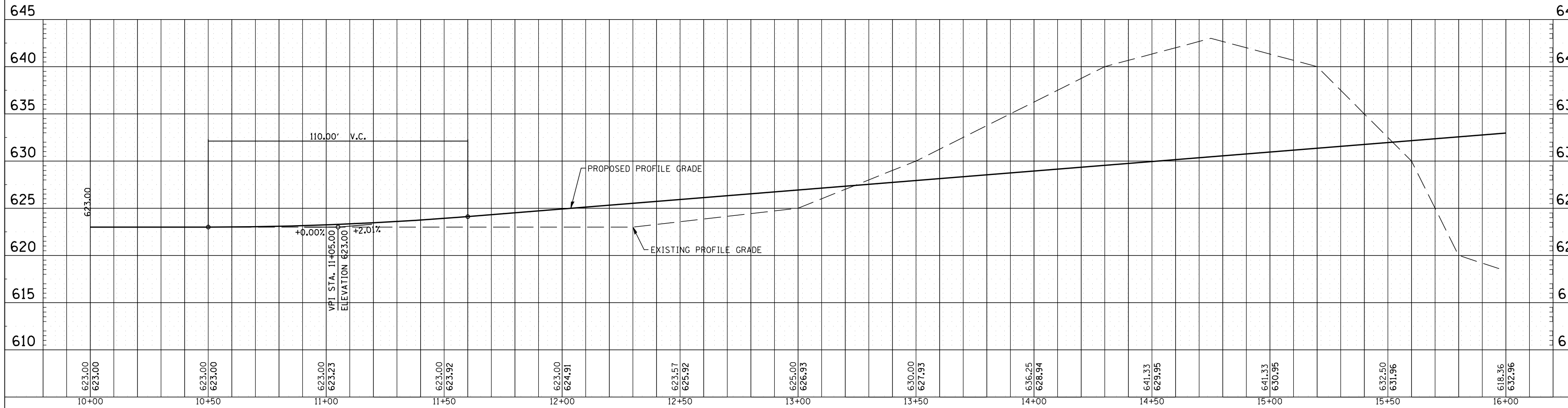
LAKE SHORE DRIVE PLAN AND PROFILES

PLAN	SURVEYED	ALIGNED	CHECKED	RT. OF WAY	CHECKED	FILE NAME
NO.						

PROF. ILE	SURVEYED	GRADES	CHECKED	BM. NOTED	STRUCTURE	NOTATNS	CHAD
NO.							

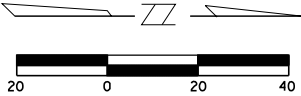


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
		MACON	
STA.	TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

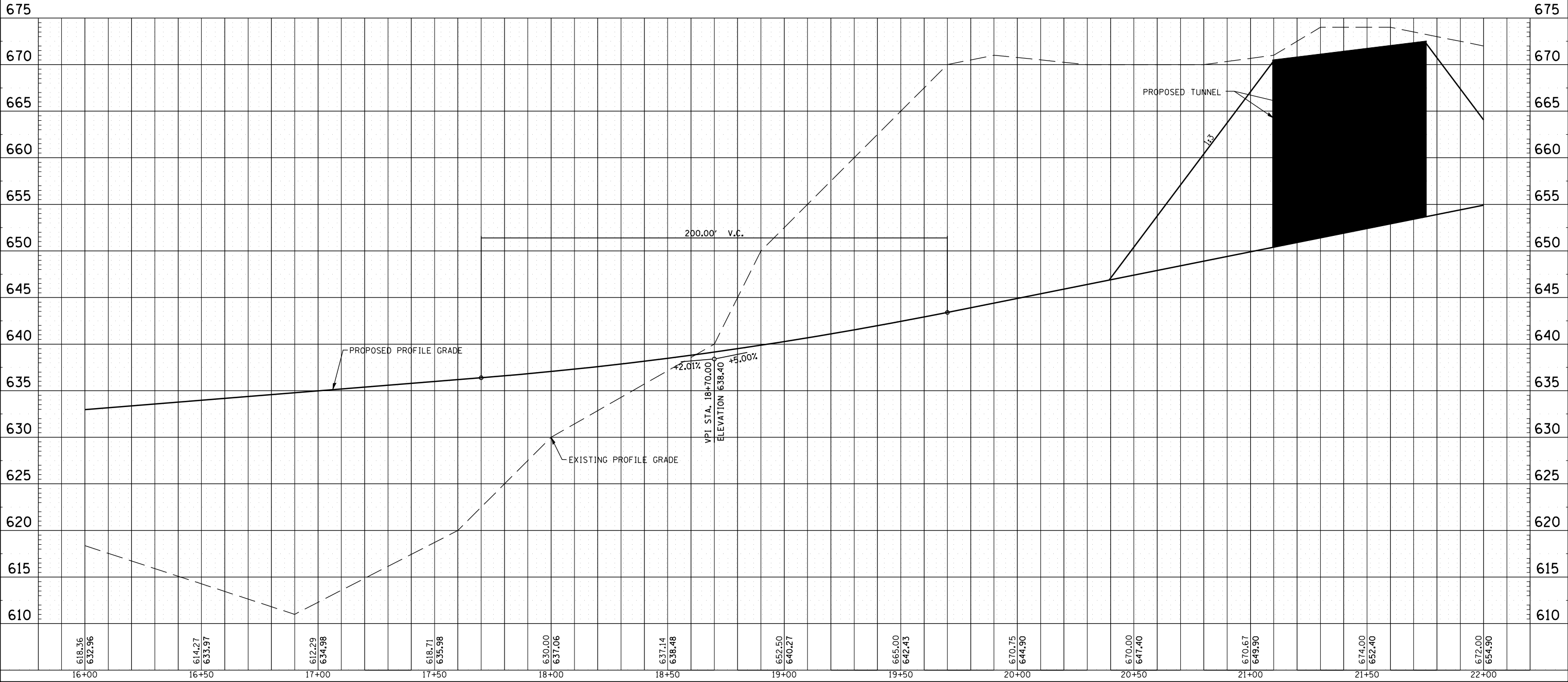


PLAN	SURVEYED	BY	DATE
	NOTED		
	CHECKED		
	BY		
	NO.		

PROFILE	SURVEYED	BY	DATE
	NOTED		
	CHECKED		
	BY		
	NO.		

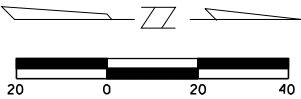


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MACON		
STA.	TO STA.			
FED. ROAD DIST. NO. .	ILLINOIS	FED. AID PROJECT		



PLAN	SURVEYED	BY	DATE
NO.	PILOTED		
	NOTED		
	CHKD		
	FILED		

PROFILE	SURVEYED	BY	DATE
NO.	PILOTED		
	NOTED		
	CHKD		
	FILED		



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		MACON		
STA.	TO STA.			
FED. ROAD DIST. NO. .	ILLINOIS	FED. AID PROJECT		

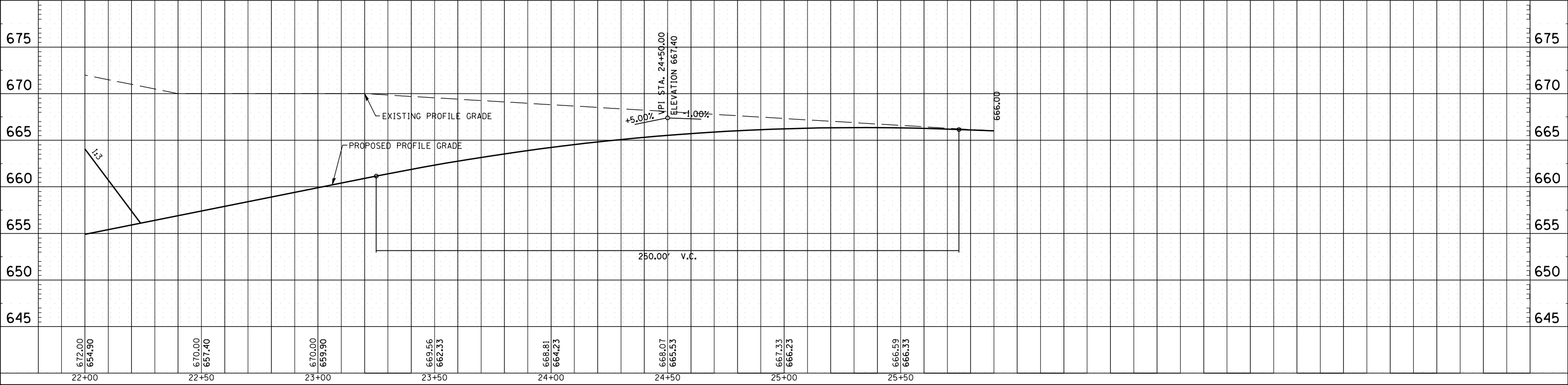


EXHIBIT 12
PUBLIC PARTICIPATION



HARRY M. COOK, JR.

ROBERT M. DEAN, JR.

JOSEPH D. CYCOTTE

SCOTT D. RIGHTER

MEETING RECORD

Project	Brush College Study	Project No.	#009-0404 F/C 3.3	Meeting Date	2/01/05
Meeting Location	Richland Community College	Reported By	Harry Cook	Report Date	2/03/05
Distribution	File Bob Dean	Present at Meeting	Greg Florian Harry Cook	Representing	RCC BWC

Attachments:

Richland Community College Fact Sheet
 Decatur Farm Progress Statewide Approach Traffic Distribution
 Decatur Farm Progress Show Approach Route Map
 Decatur FPS Progress City and Parking #2, January 26, 2005
 Richland College, Emergency & Bus Traffic Options

Met with Greg Florian who is Vice President: Finance and Administration for the college. Greg is also the central figure in the Farm Progress Show development.

Greg gave me the attached information regarding the College in general and the Farm Progress Show specifically. Generally, Greg was aware of congestion on Brush College Road between William and Faries but didn't think it impacted Richland in a major way. He often drives to work via William Street and Brush College so he has witnessed serious backups at both intersections. He is aware of the restricted lane width at the underpass but didn't seem to view that as the major traffic problem on Brush College Road.

The following was discussed:

1. Richland has a total of around 3500 students and around 200 full time staff. However, there are probably around 400-600 people on campus at any one time.
2. 70% of RCC students are from Decatur.
3. Nearly all students arrive by car or city bus.
4. Most frequent complaints are related to delays due to railroad traffic.
5. 60% of the students arrive from the south, which means they use Brush College or Hubbard Ave..
6. Greg does not think the Farm Progress Show will have a major impact on Brush College traffic to the south of Faries. The attached traffic maps seem to indicate that show attendees will be routed elsewhere with vendors and exhibitors using Brush College.
7. With regard to the William St./Brush College Rd. intersection, Greg said that it might take 2-3 light cycles to make the left turn to the north onto Brush College from William St..
8. Greg did mention that the 51 Bypass was originally proposed to pass just east and north of RCC but he thought it had been changed in response to RCC concerns.



RICHLAND COMMUNITY COLLEGE

FACT SHEET

April 2004

Quick History

Established: 1971
 Began Classes: September 18, 1972
 Began Classes at Permanent Site: September 6, 1988
 Quarter Calendar: Fall 1972 - Spring 1977
 Semester Calendar: Fall 1977 - Present

Governance

7-Member Elected Board of Trustees
 1-Student Trustee (non-voting)

Resources

Acreage: 115
 Physical Facilities
 Main Campus Building: 150,466 sq. ft.
 Shilling Center: 44,607 sq. ft.
 Agricultural/Maintenance: 12,876 sq. ft.
 Schrodt Health Education Center: 25,570 sq. ft.
 Industrial Technology Wing: 23,550 sq. ft.

Where Do Our Students Come From?*

Counties	Fall 03	Fall 02
Macon	83.2%	86.0%
DeWitt	4.8%	4.0%
Piatt	1.5%	1.0%
Shelby	2.2%	2.0%
Christian	1.3%	1.0%
Moultrie	1.0%	1.0%
Logan	.4%	1.0%
Sangamon	.5%	0.0%
Other	5.1%	4.0%

Why Do Students Enroll At Richland? *

	Fall 03	Fall 02
Transfer	53.0%	59.0%
Improve Skills	12.0%	6.0%
Prepare for Future Job	34.0%	28.0%
Personal Interest	0.0%	3.0%
Earn GED	0.0%	1.0%
Other Reasons	1.0%	3.0%

*Marketing Outreach Research Information (CARS)

Who Are Our Students?

	Fall 03	Fall 02
Part-Time	64.2%	62.6%
Full-Time	35.8%	37.4%
Men	35.7%	37.5%
Women	64.3%	62.5%
Asian	.8%	.5%
Am.Ind.	.3%	.3%
Black/Non-Hisp.	15.4%	14.4%
Hispanic	1.2%	1.0%
White/Non-Hisp.	82.2%	83.8%
Non-Res.	.1%	.0%
Avg. Age/All	28	28
Avg. Age/Day	27	27
Avg. Age/Eve.	31	32
Avg. Age/Weekend	36	35

Age Range

	Fall 03	Fall 02
15-19	42.4%	25.0%
20-24	17.5%	24.6%
25-29	10.8%	12.6%
30-34	8.8%	10.4%
35-39	6.8%	8.5%
40-44	5.5%	7.1%
45-49	4.4%	6.3%
50-54	2.8%	3.3%
55-59	0.7%	1.6%
60+	0.3%	.6%

New Students	19.8%	23.4%
Returning Students	65.1%	58.8%
Re-entering Students	15.1%	17.8%

AA/AS	53.3%	50.1%
Occupational	34.3%	38.8%
Voc. Skills	.3%	.4%
Adult Basic	.1%	.1%
Adult Secondary	.1%	.0%
General Education	10.7%	8.2%
General Studies	1.2%	2.4%

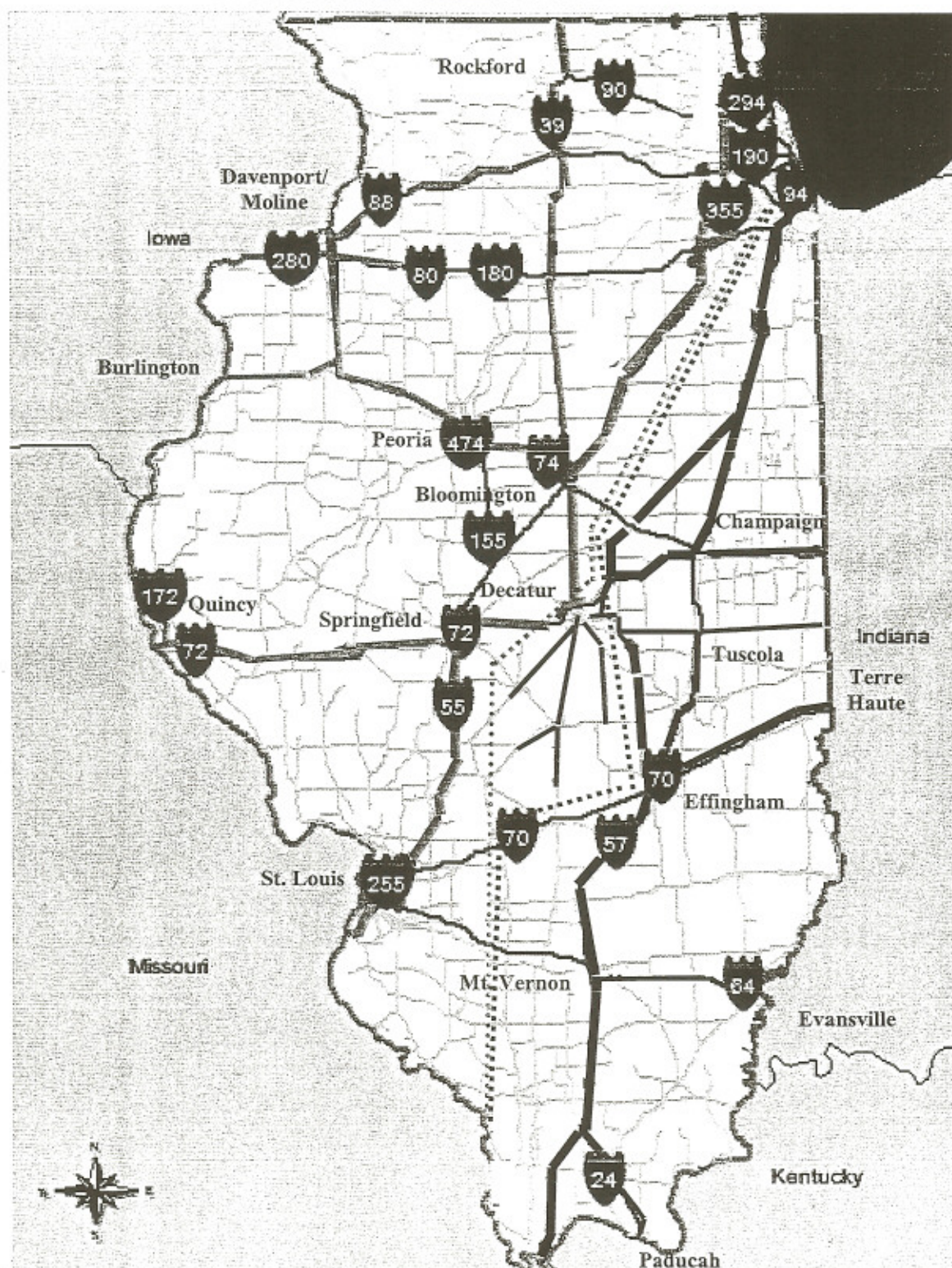
What Is Our Enrollment?

	Fall 03	Fall 02
Total Credit Students	3,342	3,569
Total Credit Hours	28,788	31,305.5
FTE	1,915	2,087

Total Non-Credit Students

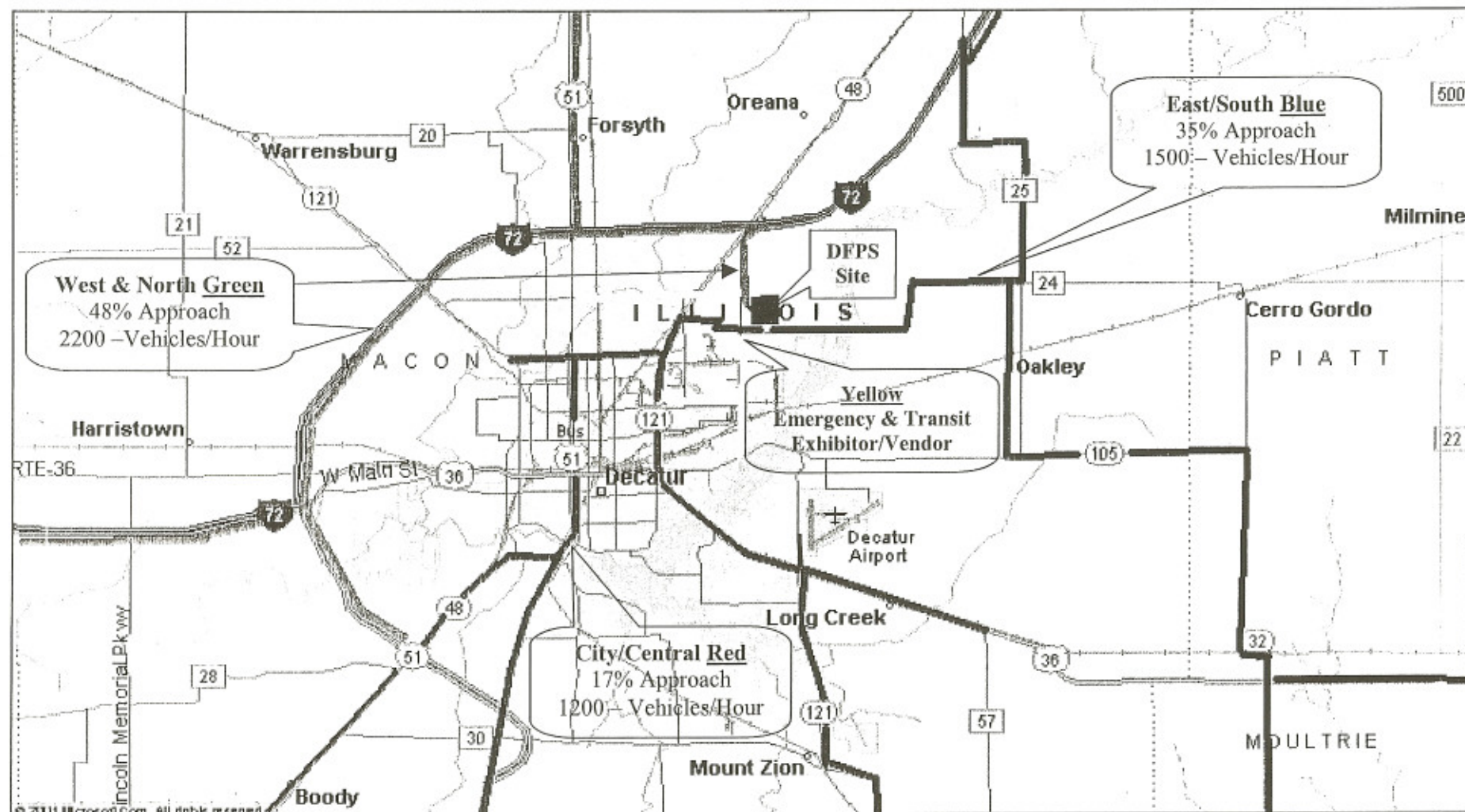
Fall 03	Fall 02
1,099	1,595

Decatur Farm Progress Statewide Approach Traffic Distribution



Access Route	Daily Vehicles	Visitor/Vehicle	Daily Visitors	5-Hr. Average Sec.
West Green 48%	11,080	2.9	32,100	1.7 Sec. (2-Lanes)
East Blue 35%	8,000	2.9	23,100	2.4 Sec. (1-Lane)
Central Red 17%	4,000	2.9	11,600	3.0 Sec. (1-Lane)
All Buses	550	55.0	30,200	----
Transit Service	----	----	3,000	----
Total	23,630	----	100,000	----

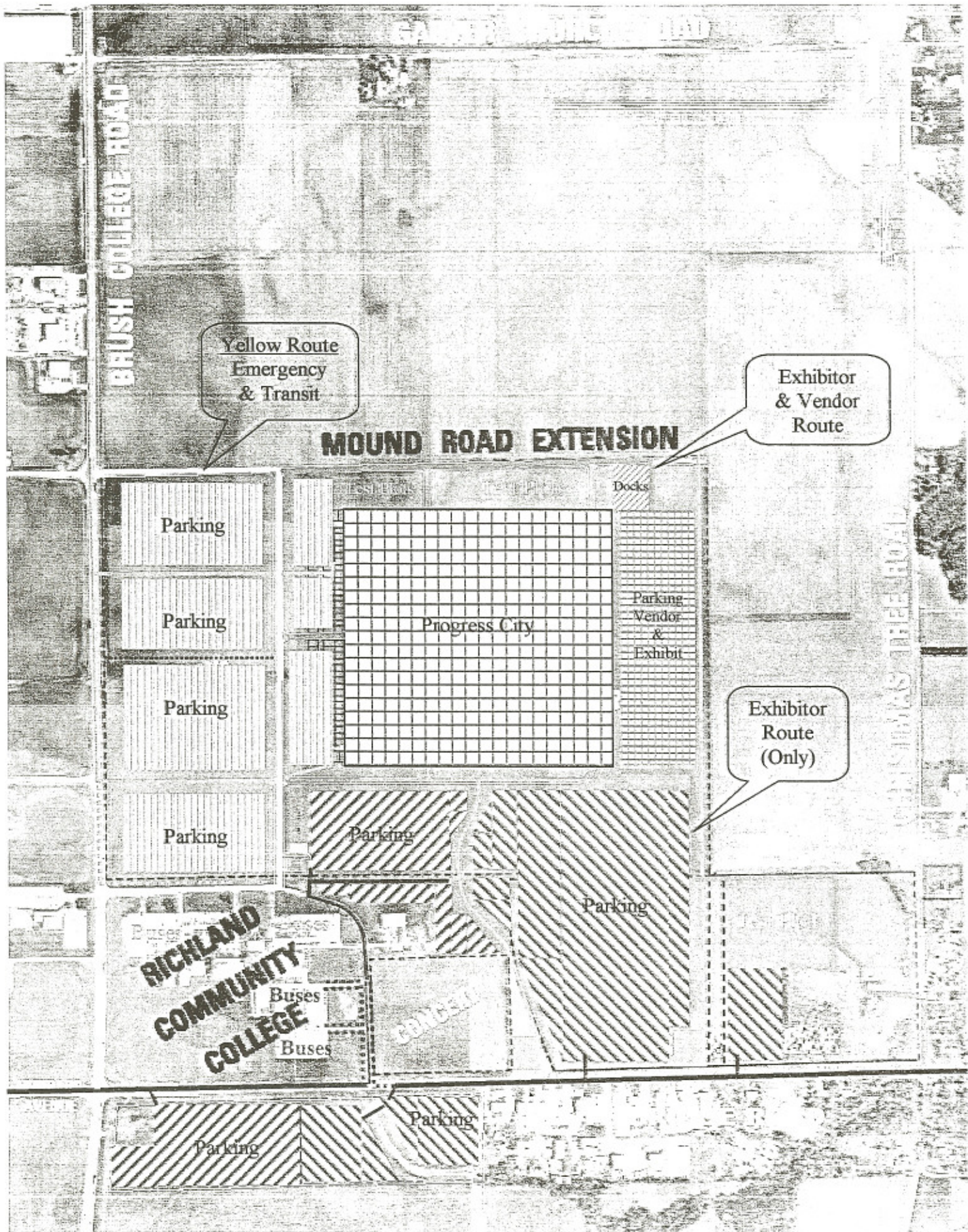
DECATUR FARM PROGRESS APPROACH ROUTE MAP



Decatur Farm Progress Show
 Daily Attendance: 100,000 (Max.)
 Daily Vehicles: 23,630
 Max. Hourly Vehicles: 4,900
 Show site loading Time: 6.5 Hours
 2-Way Operations on All Access Routes

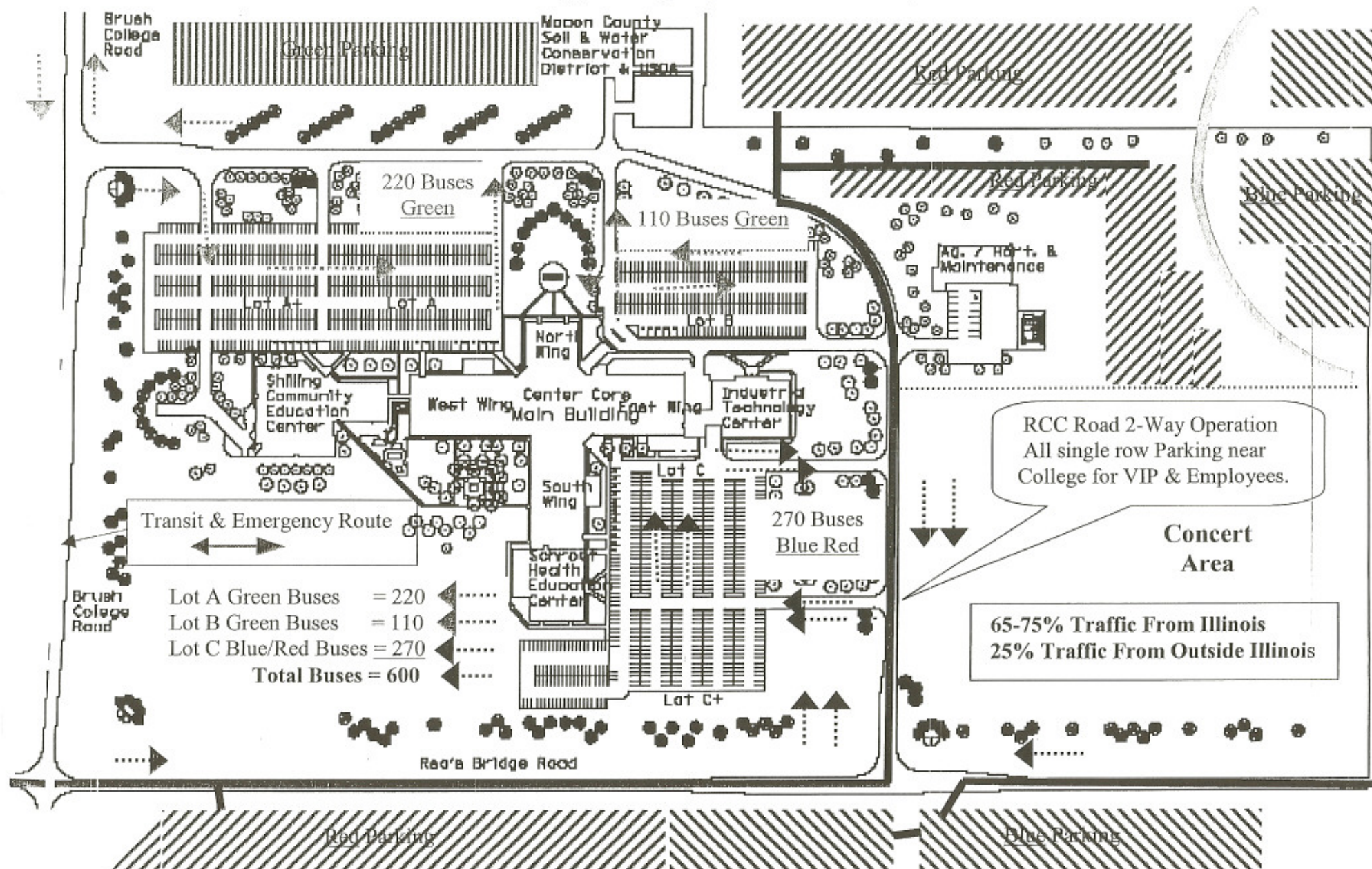


Green 48% (W I-72 & N US-51)
 Blue 35% (E I-72 & US-36 & Ill-32)
 Red 17% (S US-51 & Ill-48 & Ill-121 to Hubbard)
 Yellow Emergency/Exhibitor/Vendor & Transit (Mound)



January 26, 2005

Richland College, Emergency & Bus Traffic Operations





HARRY M. COOK, JR.

ROBERT M. DEAN, JR.

JOSEPH D. CYCOTTE

SCOTT D. RIGHTER

MEETING RECORD

Project	Brush College Study	Project No.	0090404 F/C 3.3	Meeting Date	2/01/05
Meeting Location	Brush College School	Reported By	Harry Cook	Report Date	02/02/05
Distribution	File Bob Dean	Present at Meeting	Nan Rickelman - Principal Harry Cook	Representing	School BWC

Attachments:

Met with Nan Rickelman who is the principal of Brush College School. Mrs Rickelman is very aware of traffic congestion problems on Brush College although the major focus of her concerns is not the underpass to the north. Problems originating from the Brush College/William St intersection to the south frequently impact access to and the operation of the school.

We discussed the following:

1. Schedule: School traffic peaks between 8 and 9 AM and again between 3 and 4 PM
2. Students: Currently there are 220 students plus staff at the school
3. Problems: She sees congestion in the north direction between 7:30 and 8:30 in the mornings and in the south between 3:30 and 5:30 in the afternoon. The grade can be a problem in bad weather. Trucks have trouble making it north up the grade from William Street and frequently slow or block traffic. Rear end collisions are frequent in the southbound lane. Sight distance is a problem at the entrance to the school parking lot. It can be uncomfortable pulling out on Brush College. Accidents create severe congestion. The entrance to the animal hospital on the east is nearly opposite the schools entrance and conflicts between northbound turners and southbound turners are frequent in the middle turning lane. She sees the southbound congestion as arising from cars waiting to turn left (east) on William blocking the southbound lane. She has witnessed backups reaching near the entrance to the Randall Research Center.
4. The flashing lights are in operation from 8:15 to 9:00 AM and 3:00 and 3:45 PM
5. Traffic Guard is on duty in morning and afternoon
6. Pedestrian Traffic is minimal to and from the north. All students living north of the underpass are bussed to and from school. She estimates that of the 220 students at least 175 are bused or arrive and depart by car. However she said there will always be some students who miss the bus or for some reason attempt to walk along Brush College under or over the railroad tracks. So the issue of pedestrian traffic along Brush College at the tracks should be considered.
7. Actually Mrs Rickelman didn't feel the underpass was that big of an issue for the school. She did say that they currently have 6 busses and at one time one of the drivers wouldn't go through the

Page 1 of 3

underpass while there was any opposing traffic. The driver stopped on Brush College and waited for the underpass to clear before proceeding.

8. She feels that widening the road would make it more difficult for the students and the crossing guard to get across to the east side and she asked that we consider a pedestrian bridge.
9. Mrs Rickelman was not aware of any plans to make major changes in the operation of the school. She thought that some additional students would be added from the north next year but they would be bussed. She said that she understood that there would be no additional boundary changes for the next 5 years.



HARRY M. COOK, JR.
 ROBERT M. DEAN, JR.
 JOSEPH D. CYCOTTE
 SCOTT D. RIGHTER

MEETING RECORD

Project	Brush College Study	Project No.	0090404 F/c 3.3	Meeting Date	2/02/05
Meeting Location	ADM Corporate Office	Reported By	Harry Cook	Report Date	2/03/05
Distribution	FILE Bob Dean	Present at Meeting	Roger Shelton Harry Cook	Representing	ADM BWC

Attachments:

Met with Roger Shelton who is the Deputy Director: Corporate Security for Archer Daniels Midland. Roger said that the most frequent source of complaints he heard was not the restricted lane width of the underpass and mirror damage. His general impression was the most significant problems were due to traffic back ups resulting from accidents and train switching. At times traffic can't leave Randell Research due to backups on Brush College originating from either the north or the south.

The following information was discussed:

1. Schedule:
 - a. East Plant and West Plant- roughly 7am to 3:30 pm
 - b. Corporate, Randall Research- 8am-4:30pm
 - c. Trucking – 24hours
2. Employees
 - a. Corporate – 1200-1400
 - b. Randall Research – 200
 - c. East and West Plants – 3 shifts of 800 to 1000
3. Contractors
 - a. There are around a total of 1900 contractors per day with about 700 entering the Mueller St gate on the north
4. Grain Truck Traffic
 - a. Total grain truck traffic averages between 400 and 800 trucks/day
 - b. All grain trucks enter the testing and sampling facility from 27th street. After getting sampled the trucks exit on to Hubbard and move east to Brush College and turn south. From there they go to either the East Plant or the West Plant. Those going to the East plant turn left at Gate #6 (Mueller St) and go through the grain dump and exit through the Main gate onto Faries and move back to Brush College intersection. A recent count indicated 567 grain trucks in a 24-hour period went through the East plant. Those that go to the West plant continue south from Hubbard to Faries, turn west on Faries and south

Page 1 of 3

onto Samuels and through the gate. The trucks exit back onto Samuels and then go back to Faries. A recent count indicated 132 grain trucks went through the West Plant in a 24-hour period.

5. Rail Traffic:

- a. The old Illinois Central tracks that go through the underpass are now owned by Canadian National. Those tracks are really a spur from the Canadian National line that runs e-w north of the east plant. The spur runs south across Faries, through the underpass and turns west to serve Staley. Roger thinks it could be abandoned and Staley could be served by another route. He said that could provide space to widen the roadway. He didn't think we would have much success getting the Railroad to agree to that.
- b. The tracks running just to the north of Faries are a spur of off of the Norfolk Southern main line that runs across the underpass. There are actually two switches back near the lake. Roger thinks that Norfolk Southern owns the underpass.
- c. The rail companies make at least 3-4 switches per day into both the East and the West Plants. That is when the traffic is blocked. Roger said sometimes those switches are made during the high traffic times – 7:30 or 5:00 and major congestion occurs. He has tried to get the rail companies to avoid that but he has limited success.

6. Total Traffic:

- a. A recent count showed:
 - i. Main Gate: 1021 vehicles
 - ii. Gate #6 1090 vehicles
 - iii. Gate #5 (by Lake) not available-

7. Expansion

- a. Roger didn't think there would be significant expansion impacting traffic in a major way. The expansion possibilities are limited due to the lake and other constraints. He was not aware of any plans for significant expansion.

BLANK, WESSELINK, COOK & ASSOCIATES, INC.
INTEROFFICE CORRESPONDENCE

TO	File	PROJ	0090404	F/C	3.1
FROM	Harry Cook	SHEET	1	DATE	4/5/05
SUBJECT	Telephone conversation with Roger Shelton				

I talked to Roger about the railroad ROW on the west side of Brush College south of Faries.

Roger said it is used exclusively to switch rail cars into Staley. He said it is used fairly infrequently. They switch long strings of 75 cars or so every 2 or 3 days. The cars are pushed on the tracks south of Firestone to the east past Caterpillar to Brush College and south down Brush College across Faries beneath the underpass and then on to the west into to Staley. He felt that Staley could be accessed from the west though the old Wabash Depot yards. He thought that that route would involve the lines of more than one railroad company and that might be a problem. He didn't know of a contact at Staley's to begin a discussion